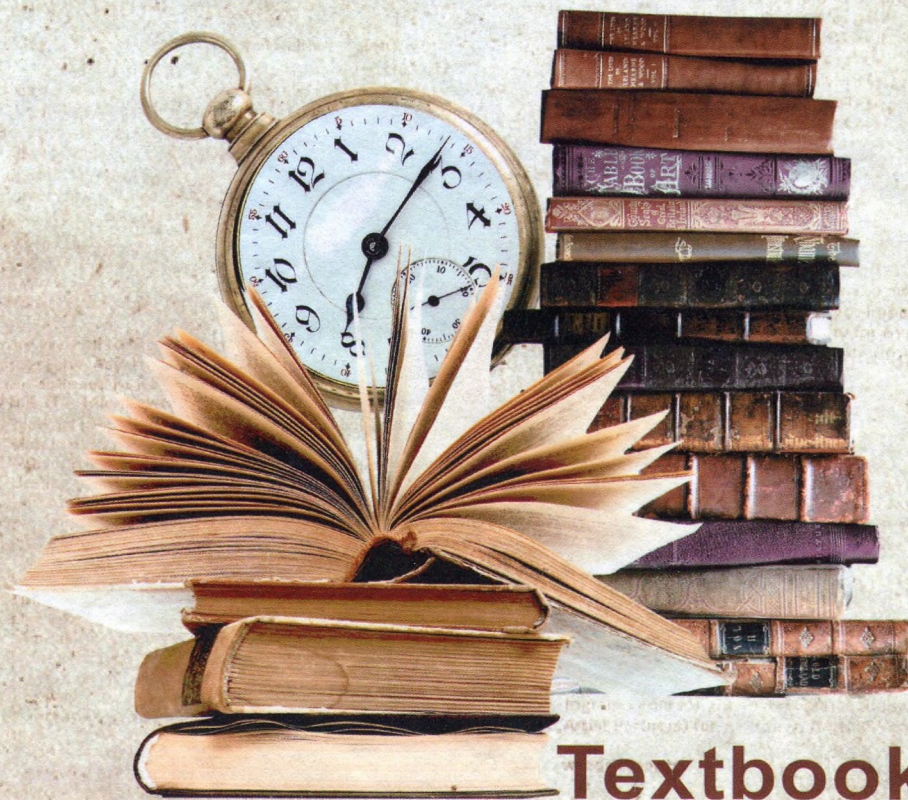


O. G. Romanovskyi  
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# PEDAGOGY OF SUCCESS



Textbook

THE MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

NATIONAL TECHNICAL UNIVERSITY  
“Kharkiv Polytechnic Institute”

**O. G. Romanovskiy, V. Ye. Mykhailychenko, L. M. Gren’**

# **PEDAGOGY OF SUCCESS**

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for students of higher education establishments

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of Ukraine

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Розглянуто зміст педагогіки успіху та основні напрямки її вивчення. Показано необхідність формування професійної самосвідомості: самопізнання, позитивної самооцінки, усвідомлення Я-концепції та їх роль у процесі саморозвитку. Обґрунтовано, експериментально перевірено ефективність педагогічних умов, необхідних для формування спрямованості студентів на успішну професійну діяльність. Наведено різні методики, які можуть бути використані для саморозвитку і самовдосконалення особистості.

Призначено для студентів, магістрів, аспірантів і викладачів усіх спеціальностей.

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The content and main directions of pedagogy of success study are considered. Authors show the necessity of professional self-conscience formation, which includes formation of self-knowledge, positive self-image, awareness of self-concent and their role during the self-development process. Effectiveness of pedagogical conditions, which are required for the students focus on successful professional activity formation, is justified and experimentally verified. Various techniques that can be used for self-development and self-perfection are provided.

Book is intended for graduate and postgraduate students, and teachers of all specialties.

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## **Introduction**

In the process of national education's modernizing, special importance is paid to the task of training competent, competitive labor market specialists who master their profession successfully and adapt to society easily. To solve current tasks of training highly competitive specialists it is necessary to search for new forms of innovative approaches to the organization of educational activities of students, to enable them to master their future profession. In this regard, it is necessary to improve the education system aimed at the formation of the personality that is aware of its capabilities, tends to self-education, self-improvement, maximum self-fulfillment, success in life.

The success of learning is one of the central problems of pedagogy. Therefore, we should know the laws and mechanisms of gaining success, which are dealt with by pedagogy of success in order to answer questions related to the search of optimal education systems based on the principle of achieving the best results within learning process, and in the course of professional activities. The methodological feature of this approach comprises constant purposeful work on oneself.

The main focus of pedagogy of success is associated with humanistic psychology and pedagogy, which imply personal-oriented approach in interaction with students. Such training considers their individual qualities, interests and abilities, personality development, and self-development. It is an important component of the new pedagogical thinking, which requires a review, re-evaluation of all elements of the pedagogical process: teachers' attention to a student's personality, credibility, acceptance of students' goals, needs and interests, and the creation of maximally favorable conditions to reveal personal development and potential of students, their self-determination and self-realization.

Nowadays, education should be considered from the point of continuous system formation that meets the needs of the society, as well as state-governmental educational policy and the requirements of the Bologna process. In these circumstances, it is essential to change the strategic objectives of global education, to refocus from specialist knowledge to human and personal qualities of students, to reveal their abilities, i.e. to change contents and methods of their training for future careers.

## **Part 1. THEORETICAL FOUNDATIONS FOR PEDAGOGY OF SUCCESS**

### **1.1. Conceptual approaches to students' professional training in modern higher educational institutions**

#### ***1.1.1. The conformity of content and quality of professional education to requirements of modern society***

In the current context of economic, social and political crisis in our society, new requirements have been set to universities. They are as follows: training of a successful, competitive, active, resourceful, strong-willed, moral, self-confident personality. As V. Kudin, a famous Ukrainian teacher, writes, "... rapidly-occurring social changes, the ever-spreading assertion of modern technology, growth of communication, a noticeable lag of the sensory-emotional from the rationally-abstract, destruction of centuries-bound moral foundations and lack of clearly defined new principles of morality, all these facts and much more in the of nations' existence require significant changes in the education system" [106, p. 34].

Education is known to be a way of personal development, creation of intellectual and spiritual potential of a nation, a prerequisite for scientific, technological and social progress. The discrepancy between content and quality of professional education and the modern requirements is a serious problem of society. Under the current situation, university specialists are required to be professional and mobile at the labor market; they also should be able to think critically, make decisions, work in a team, and be capable of self-development and learning through life. The significant socio-economic changes taking place in Ukraine urge a review of major conceptual approaches to solving these tasks, and improving forms and methods of specialists' professional training.

Modern trends in the society transformation demand as S. Sysoeva [196, p. 250] claims, the development of new qualitative framework of the education system. This refers not only to the content, forms and methods of teaching, but also to the very understanding of modern education as a continuous process of leading to formation of creative, competent and skilled people competitive in the global information space of the 21st century. V. Andruschenko believes that anyone who has mastered the basics of Sciences, who is able to accept and transfer information, has been formed and practically prepared in a professional, linguistic and philosophical context can be considered such a person.

In studies of professional training of future specialists we can identify the following fields: methodological foundations of education philosophy (V. Andruschenko, V. Kremen, I. Zyazyun, V. Lugovoi, etc.), the theory of

continuing education (E. Bondarevskaya, S. Goncharenko, R. Gurevich, N. Nichkalo, S. Sysoeva, etc.), professional training of specialists in higher education (V. Bykov, G. Vasyanovych, E. Kovalenko, I. Bech, V. Lozovaja, O. Meshchaninov, L. Necheporenko, A. Ponomarev, I. Prokopenko, A. Romanovsky, T. Sushchenko, etc.).

In the traditional pedagogical literature the higher education is often understood as a training process within the system of professional training of specialists of higher and academic qualifications. According to the encyclopedia of education, it is considered as a qualification level in a specialty obtained on the basis of completed secondary education, formally endorsed with a graduation diploma and characterized by a set of systematized knowledge, practical skills, personal qualities, which make it possible to solve professional problems at the level of scientific, technological and social progress.

Considering the aforementioned facts, the main objective of education is to master complex, holistic professional activities. Nevertheless, this idea does not deny the value of knowledge nor overestimates the value of activities, as they go side by side. The content of education must provide a combined system of knowledge, skills, creative abilities, attitudinal and behavioral qualities of the personality stipulated by training requirements of society and the goals students should be aimed at. Its content is defined by the following goal of education: the development of a person's potential, of his/her readiness for professional activities, as well as for self-development and self-improvement.

At the same time the content of education comprises everything that ensures achievement of this goal. It comprises not only the content of the material being studied, but also the nature of learning activities, technology, methods and forms of education, since the personal traits, content of education and development largely depend not only on what is learned, but also on how it is studied. Only on this condition educational content of the personal and professional skills of an individual, formed as a result of the implementation of related activities of a teacher and a student will be generated.

The construction of such educational and training activities, which would provide to achievement of goals of professional education, is only possible within transition from an informative type of education to the learning, allowing to manifest, and develop cognitive and creative abilities of students, to manage the formation of their self-activity. The result of this purposeful work is to develop such characteristics of a specialist, which can ensure him success in his chosen field of activity.

Education has traditionally been viewed as a purposeful process bringing together education and training of a personality. The concept of upbringing in modern society is multifaceted and has a great variety of specific features in treatments, depending on goals and objectives of specific educational activities.



There are some basic fundamental characteristics that describe this process in pedagogical theory and practice.

In some cases, this concept is treated as an extremely broad notion including both upbringing and education and training. In such a way upbringing was considered by the great Russian teacher K. Ushinskii. Later on, however, this concept was used in a narrower pedagogical sense. For example, Yu. Babanskii determines upbringing in a special pedagogical sense as the process and the result of purposeful influence on personality development, its relationships, features, qualities, attitudes, beliefs, ways of behavior in society [12, p. 10]. H. Liymets, and after him, L. Novikova and A. Mudrik are of the opinion that upbringing is a purposeful management of the personality development process.

Often, upbringing is considered as a process focused on the impact on a personality in order to encourage the person to follow certain norms, rules of social behavior. Features of educational impacts are described in various domestic and foreign publications, starting, for example, with works of P. Blonskii [20, p. 12]. If we consider upbringing as a rigid pedagogical management of a student's behavior, then we mean the impact on personality. In the second half of the 20th century upbringing was increasingly treated as a two-way process of interaction between a teacher and a student, which reflects the peculiarity of humanistic upbringing process.

The main mechanism of upbringing is involvement of students in the purposefully organized activity and communication. Revealing the purpose of education more specifically in relation to higher education institutions, we can say that the process of obtaining higher education means a development of spiritual and physically healthy, intelligent, high civic, humanistic-oriented, socially active, polite, successful, professional, and creative personality.

Thus, the main characteristic of upbringing is a targeted influence on a personality, which pursues certain goals in reproduction of clearly defined social norms. For a long time there have been developed theories of active upbringing, when the process contains interaction between a teacher, a student, and social circumstances. This means that upbringing moves from the object-subject relationship to subject-subject relationships. The process of upbringing is seen as an active process, which is closely related through their objectives and functions to active learning.

This approach was developed within the framework of pedagogical psychology in works of Piaget, Erickson. Piaget believed that the school required active students who would be accustomed to autonomy of search based partially on their own spontaneous activity and partially due to the materials prepared for them. This is only possible when teachers will move to the use of "active method" of education and training of students.

The key role in this, according to Rogers, is given to a spontaneous cognitive activity of students, a teacher also acts as a "Facilitator" (from the English "to facilitate" – to make easier) of his/her natural development in the socialization process, provides the necessary materials, poses challenges and provides general pedagogical guidance, adequate to functional level reached by the child. The teacher is no longer a passive "agent" of socialization, but through the activation of training activity he becomes an equal subject of training and educational process.

In this case, not only modern theoretical pedagogy, but also educational practices take into account social conditions in which the upbringing and educational impact take place. Strictly speaking, it is nevertheless assumed that it is not social environment that brings up, but only acting subjects, creating by their transforming activity the factors of the environment. Other elements of social environment (it is the impersonal factors of the social environment) guide the process of upbringing into a strictly defined way.

As early as the French Renaissance, thinker M. Montaigne [136, pp. 158–198] formulated the basic principles of upbringing of educational and social activities of a student, based on two postulates:

- unity of training and upbringing, which is an integral part of the learning process today;
- differentiation, which means that the disciples should not be presented uniform requirements in training and upbringing, and that an educator should take into account their abilities, character, inclinations.

1. The principle of the right to choose. The educator must not only teach the truth and to demand obedience, but, above all, having shown the full range of opportunities, let the pupil choose something himself. If a teacher influences and directs, he does it very gently and unobtrusively.

2. The principle of "let the teacher ask a student not only the words of the lesson, but also the meaning and the essence, and judge about the benefits that it has brought, not by memory indicators of his pupil, but on his life." It should be noted that under the knowledge and lessons are meant not only and not so much sciences, but also life lessons – the norms, values, behavior patterns, the necessary human qualities – everything a person is trained for a fruitful life in the community.

3. The principle of selectivity. "Let the mentor make the student sift through a sieve all that he brings to him, and let the teacher put nothing into the student's head, relying on his authority and influence." Mentor must tell about the points of view on these issues, but not sort them on bad and good, on right and wrong, not judge them, but give the right to the student to evaluate and to select.

4. The principle of sensational penetration. "And let him not be afraid to forget, if he likes it, where he got those views, if only he could make them his own. Truth and reasons of mind belong to all, and they are not to a greater extent the property of those who stated them for the first time than those who expressed them later. "

Thus, the main thing is not to memorize, but to feel, experience, absorb theories, situations, the truths, and then what you have created in the course of the analysis, belongs to you and serves you a lot more than what was memorized by you, put into the depths of memory. It is analysis that is necessary, and the work of consciousness, and you need to train it every day. In this regard, M. Montaigne formulated his fifth principle – the principle of dialogue and the next one – that of the unity of the spiritual and physical upbringing, it is the unification into the system of all kinds of upbringing effect.

Speaking about upbringing regarding transformation of the educational system, many scientists nowadays are turning to innovative methods of upbringing. However, it is important to integrate traditional methods confirmed with time and innovative ones which integrate upbringing and training into a unified educational process. A specific example is Waldorf pedagogy (R. Steiner's pedagogy), recognized by UNESCO as the pedagogy of the XXI century. This system is best connected with the principles of lifelong education, as it embodies the idea of free upbringing, humanistic pedagogy, self-knowledge and self-identity in terms of partnership and co-operation subjects of education and upbringing.

The main difference of the upbringing within the system of continuous education is the ability to implement principles of consistency and continuity of upbringing effect with no sharp methodical and methodological transitions and contradictions. Creating of such a system is based on the following principles:

- humanization of relations of participants of educational activities, which is based on perception of training and education as the highest social value;
- democratization, i.e. elimination of authoritarian parenting style;
- psychologyzation of the educational process that involves the study and consideration of the needs and psychological characteristics, motives of pupils;
- self-creative arts;
- all-round development of a personality's potential.

### ***1.1.2. The main approaches to training and education in the system of higher education***

In modern pedagogy the most important principles which determine the formation of goals and objectives of education and training are actively developed. It is possible to distinguish the following approaches:

*Knowledge-oriented approach.* Knowledge-oriented is an approach that focuses on the acquisition of long-term, systematic and interrelated knowledge, which includes both theoretical and practical epistemological levels. One of the main requirements to the quality of specialist training is his deep, fundamental knowledge, and expertise generated only as a result of a cognitive activity due to motivation and commitment to learning. They provide the most complete understanding of the phenomena and processes of the ambient world that forms the inner world of a student.

However, in the traditional system of education some negative trends in learning and knowledge management can be traced. There is the subjective-informative method of teaching that dominates; it means uncritical approach to the methodology of scientific disciplines, resulting in a formal assimilation of not quite complete and necessary scientific information. This requires moving away from the traditional system of knowledge transfer, which involves predominantly memorization technique.

In order to improve the quality of teachers' training it is necessary to solve a number of fairly complex issues, including such significant problems like how to teach the student so that they can choose from a vast area of knowledge required in the shortest time possible; how to build a learning process, so that a student meantime could form not only situational skills, but also strong knowledge; how to develop his/her analytical and critical thinking. Since the personality of an expert is formed as a result of his/her own labor and effort, the entire period of a student's learning at a higher education establishment should be his continuous, active cognitive activity, aimed not only at knowledge, but also at their creative use in future careers. The organization and management of this process is the primary goal of the teaching staff.

The educational process must be based on the principle of "to teach studying skill" in order to organize an active transformation of learning and cognitive activity of students into the professional one it is necessary to arise in them an unrelenting commitment to the process and the result of their actions. Education without such a principle at the expense of only memory techniques and willpower efforts is possible, but in total it produces much lower results. Thus, it is necessary to restructure the educational process so that in its basis there was laid the developmental system of specialist's training.

*Activity-oriented approach.* The most developed and corresponding to the contemporary needs of educational process is the theory of activity, developed in psychological and pedagogical science. In accordance with the activity approach, mastering the content of the historical experience of the people is fulfilled not by the transmission of information about it to a person, but in the process of his/her own activity on the objects and phenomena of the world. In

the course of activity manifestation of human capabilities and the formation of his/her skills take place.

Departing from this, the main goal is concretized and professional education can be viewed as mastering a complex, holistic professional activity. An attitude to the chosen profession, the ability to see it from other sides and oneself in it plays a great role in the development of a student as a professional in any field. To do this, one needs to understand the specifics of a particular type of activity, correlate one's possibilities with it, and only then can we talk about a professional identity's having been formed. In this regard, in the process of learning and upbringing, each student in a relatively short period of time should get an idea of the chosen route and the necessary basic knowledge, practice, and skills.

The essence of the activity approach is largely determined by the nature of the subject-subject relations in the learning process. In practice, students are often poorly involved in the subject activities related to their future profession. Activity approach in the learning appeals to the intrinsic activity of human, induced not by coercion, but specially organized content and methods of education. Under this approach, learning activities should be designed so as to realize the importance of personal training for a successful career.

I. Bech believes that the professional activity may become the main direction of the course of life if it gets personal significance, i.e. if it is able to interest and inspire people. Work activity, like any other, gives to a person a sense of comfort only if a person feels the need in it and therefore achieves the greatest success thanks to his/her individual traits.

The leading idea of modern education is expressed in an attempt to link the resulting component of education with the planned development of the individual results. So in actual practice competence approach is actualized. It is often suggested lately that students should not be educated at all, but achieve some level of competence in their chosen professional activity.

In this connection an attempt of the scientists E. Bondarevskaya and S. Kulnevich to define the competence approach is of interest. In their opinion, a more modern approach is to consider it as a master set of competencies focused on the semantic component of any kind of activity. V. Bolotov and V. Serikov believe that this approach brings forward not a student's awareness, but the ability to solve problems. Here the emphasis is on the ability to use knowledge, skills and abilities to arrange, to solve the problems that a graduate has in his/her life. This requires changes in the educational system. O. Lebedev understands the competence approach as a set of general principles of the goals of education, its content, organization of educational process and the evaluation of its results. Among the principles of competence approach O. Lebedev includes the following:

- ability to independently solve problems through the use of equity and social experience;
- didactically to represent a social problem-solving experience as the main content of education. [110]

Analyzing the materials on the studies of the essence of competence approach, we can say that they are mainly concerned with the understanding of competence as the ability to resolve the cognitive, communicational, organizational, moral and other problems. Thus, the competence approach is a set of common regulations governing the logic of the educational process focused on the development of a complex system of awareness, skills, semantic orientations, adaptive capacity, experience and ways of reform activities aimed at a particular product.

In recent years, more attention is paid to the idea of the formation of the education content in the context of the *culture-centered (culturological) approach* (S. Omelina, E. Bondarevskaya, V. Kudin, V. Lozovoy, etc.). The initial position, on which the concept of cultural concept is based, is a provision that the system-learning function is to transfer to the young generation the content of a society's social culture for its preservation and development. According to scientists who adhere to this approach, a single source of educational content is the culture in its broadest sense.

The socio-cultural educational paradigm is also linked to the dynamics of contemporary society and information updating of human potential. New information technologies are actively involved both in the sphere of education, and in the very sphere of social life. They are a major part of their updating, as well as of a person's development. In this case, culturally significant information is not only passed, but is also to some extent interpreted as a result of which it forms a person's inner world.

Culturological meaning of the content of education is to develop a person's capabilities in all aspects of their activities, including professional ones, through acquisition of knowledge about nature, society, man. Recently, researchers are more likely to say that a higher educational institution should shape the future of society. Education can be created to give new forms of social life based on humanistic principles.

Social and personal-individual educational content is related to the fact that any object of knowledge has at least two meanings – realized-objective and subjective. The objective value of the content is determined by the formation of the social order of society, the challenges that it poses in front of him, on the basis of the level of development of industry, science and culture, as well as the needs of society. Therefore, in the content of education is expressed its social sense that can be studied by analyzing the social functions of education at a certain stage of development. The objective circumstances are determined by the

level of educational content and innovative technology, a place of higher education in the society and the state of society as a whole. It is known that the states, where there is a well-tuned mechanism of state support for innovation, occupy their leading position in the world in terms of competitiveness.

Subjective value of the content of education, which is completely determined by the interests, goals, social and moral motives and needs of a certain personality, is called the individual-personal sense of education. Consequently, the main direction of change in the system of education is associated with a return into higher education of interests, desires and abilities of a student to learn, which is only possible through filling of education content with individual personal meaning, and it depends on the morally-social needs and values of future professionals.

Today's practice of education needs a modern concept of education's humanization aimed at personal self-development of the people involved. It is necessary to understand the ideas and experience of leading foreign and native educators in the new pedagogical thinking. "High school's educational process with all its reality, if it is built on humanism, becomes a new context of human development, imparting to it a set of special conditions for self-knowledge, a constant source of its rising reflexivity ", B. Ananiev [6] stressed.

The humanistic pedagogy is the direction in contemporary theory and practice of training and education that emerged in the late 50's – early 60's in the United States as a pedagogical implementation of the ideas of humanistic psychology. The focus of the humanistic pedagogy is a unique integrated personality seeking to maximize the scope of their opportunities, open to new experiences of perception, capable of conscious and responsible choice in a variety of situations.

One of the main provisions of humanistic psychology is the point that a person is an active, creative being, endowed with potencies to the continuous development and self-realization, which are a part of his nature. According to this theory, an individual's central aspect is his aspiration for the future, to the free realization of his potential, especially the creative one (the theory of A. Maslow), to strengthening the faith in himself and the formation of the ideal *I* (K. Rogers). It is the achievement by a person of such a result that is proclaimed by humanist pedagogy as the main purpose of upbringing in contrast to the formal transfer of knowledge and social norms to students in the traditional pedagogy.

Humanization of education is the central component of the new pedagogical thinking, providing review, reevaluation of all components of educational process. It implies respect of teachers, for an individual, as well as trust, acceptance of his/her personal goals, demands and interests, provision of maximally favorable conditions for disclosure and development of a student's

capabilities his/her self-determination. This is a system of training focused on the priority development of common cultural components in the content, forms and methods of learning and, thus, the formation of personal maturity of the students, development of their creative abilities, disclosing full potential.

A measure of humanization of the training process at the university is determined by how this process creates preconditions for a person's development and self-realization, disclosure of his inherent natural inclinations and his ability for freedom, responsibility and creativity. In accordance with this goal there should be adjusted the goals of educational process which has to be focused on the interests of each individual student, on satisfaction of his needs, and creation of conditions for realization of his many-sided potential. Furthermore, this idea is a cornerstone to all the others.

Humanistic education is aimed at holistic education of personality. But to achieve this goal, while on positions of the traditional psychological and pedagogical understanding of the educational process, is impossible. As an alternative there is the idea of education of an individual by an individual, which implies a focus on the inner world of a person, that is, the subjective conditions of the educational process. This approach is a methodological basis for the development of new pedagogical thinking.

In terms of psychological and pedagogical theory we should talk about the system of interrelated principles of constructing and organizing of pedagogical interaction that will provide a joint personal growth of students and teachers, their combined personal development. This idea of education of an individual by an individual should lead both to restructuring on equal relationships between the psychological and educational science and teaching practice and to overall humanization of the educational process as a whole.

A leading trend of the modern educational theory and practice is *personal-oriented approach* to education. There are different points of view on its essence. Some see in it the realization of individual approach through the organization and presentation of educational material of different levels of difficulty, while others associate it with innovative technologies that are being introduced into the teaching practice. However, one should agree with the majority of authors that connect personal-oriented learning with the personality of the student, the conditions of his formation, development and self-development of the personality in the process and under the influence of training. The problems of a personal-oriented approach to the organization of training activities were considered by many outstanding teachers (B. Ananiev, N. Basalaeva, B. Bitinas, I. Bech, N. Bordovskaya, V. Bocharova, V. Yevdokimov, A. Rean, S. Podmazin, V. Serikov, I. Yakimanskaya, et al.).

The personal approach offers as a leading benchmark the main content of education and the main criterion for success of training not only knowledge,



skills, i.e. functional readiness for implementation of certain activities, but also the formation of personal qualities: orientation towards a successful professional career, creative ability, adequate self-esteem, will, self-confidence and one's effectiveness, capacity for self-development and self-improvement. This is a desire to reveal and shape a personality, its individuality, to develop the best features and neutralize negative ones, that requires creation of favorable pedagogical conditions for it.

In a personal-oriented approach, the main condition for the preparation of future specialists is the personality of the teacher, his attention to the student's personality, his inner world and the formation of responsibility before personal *I*. Success of upbringing is characterized by comprehension of one's *I*-concept, harmony, and formation of the inner world of a person, the desire for personal growth. Today, education can and should be understood as the interaction and cooperation of teachers and students in teaching and learning activities, aimed at their self-realization and achieving success in life.

The authority of the teacher is an integral characteristic of his professional, educational and personal position in the team, which is manifested in the relationships with colleagues and students, and influences the success of the educational process. It is formed at sufficiently with high level of development of the three types of pedagogical skills: subject-related (scientific knowledge), communicative (knowledge of their students and colleagues), gnostic (knowledge of themselves and the ability to adjust their behavior). Investigations that took place in educational psychology by N. Kuzmina and M. Tutushkina identified the main components of the teacher's activity:

1. The constructive work is related to the selection, the ability to build educational, material and design development of a student's individuality.

2. Organizational activities include the organization of his own behavior (pedagogical action in the real world activity) in the classroom and outside, feedback from students (opinion, knowledge, interest) and the activities of students, their actions and deeds.

3. Communicative activities. It is a joint activity of the teacher and the student, construction of interpersonal interaction (perception and understanding each other) and relations in the process of educational activity, communicative competence.

4. Reflective activities – the ability of a teacher to analyze and evaluate his teaching career, to develop self-awareness which is manifested in self-knowledge, self-evaluation, and self-regulation of behavior, aspiration for personal growth, self-expression and self-regulation.

The task of teachers is to purposefully identify and develop potential abilities of students in mastering knowledge and skills in the use of information. However, in practice, the training process is still tightly regulated by the

standards, the program, the terms of their development, forcing teachers to act in accordance with them. Standardization of education prevents higher education establishments from choosing their independent educational path, on which advocates of the personal-oriented approach insist.

So far significant positive change in the practice of education has not taken place. Absence of thorough content, methods and forms of humanistic and personal-oriented approaches leads to the fact that in most higher education establishments they remain to be declared, are replaced by the usual orientation on standards in education. The main provisions of the humanistic direction and personal-oriented approaches remain to be an implied and secondary by-product of teaching.

### ***1.1.3. Innovative processes in the educational system***

New requirements for the education system of Ukraine demand modernization, renovation of all structures of educational activities and, above all, its educational process. For our country to enter the European and world educational space it is necessary to implement the ideas of the Bologna Declaration of 1999, the main ones being:

- construction of a European area of higher education as a condition of development of citizens' mobility and their employment;
- strengthening the intellectual, cultural, scientific and technical capacity of countries that are part of the Bologna community;
- improving the international competitiveness of national and European system of higher education;
- increasing the determining role of universities in the development of national and European cultures.

Thus, the essence of the Bologna process is the formation of pan-European system of higher education, called the "European Higher Education Area". The main key points of this process:

1. Introduction of two-cycle instruction. The first cycle involves mastering the first academic stage and lasts not less than three and not more than four years. Education during the second cycle involves obtaining a master's degree or a doctoral degree, provided the total duration of 7 – 8 years of training.

2. Introduction of the credit system. It is proposed to introduce to the European Higher Education Area volumes of labor capacity of academic work in credits on the basis of ECTS (European Credit Transfer Accumulation System).

3. Control of the quality of education. It is assumed to create independent national councils and international organizations of accreditation agencies, which will assess the knowledge and skills of graduates on the basis of standards of transnational education.

4. Promoting mobility. There is a question about the substantial development of mobility of students, teachers and other staff for the mutual gaining the European experience. It is expected to change the national legislative acts in the field of employment of foreigners.

5. Providing employment graduates. There should be simplified professional definition of qualifications through the universal use of the Diploma Supplement, recommended by the UNESCO. Knowledge, experience and the skills of graduates should be applied and practically used for the benefit of the whole of Europe.

6. Ensuring the attractiveness of European education systems. One of the main tasks to be solved in the framework of the Bologna process is to attract to Europe more students from other regions of the world. The introduction of European system of education quality assurance , credit accumulation system, easily accessible qualifications contributes to increasing interest of European and other citizens in higher education.

Today, Ukraine is doing its best to implement the principles of the Bologna process. Thus, the question of reforming higher education of Ukraine is reflected in the Decree of the President of Ukraine dated 14 September 2000 "About the program of integration of Ukraine into the European Union," in related directives of the Cabinet of Ministers, in decisions of the Ministry of Education and Science of Ukraine. The National Doctrine of Education has passed examination of the Council of Europe. Experts who are familiar with the practice of implementing the declared domestic law norms in universities and colleges visited Ukraine. The selected ways of modernization of higher education are in tune with the European approach, although in this direction a lot of work is still to be done.

The main objectives of the establishment of the European area of higher education include:

- adoption of a system essentially based on two educational levels (Bachelor, Master);
- creation of a unified system of credit units and a more comparable degrees;
- elimination of obstacles to access of students to all educational services;
- development of common criteria for assessing the quality of teaching and education, mobility schemes and integrated programs of study and research;
- improving competitiveness and attractiveness of the integrated system of European higher education.

The Bologna process provides for implementation of a three-year program at the Bachelor stage, further complicating the task of acquiring a high-level fundamental and professional education, sufficient for a qualification of

competence. So, most countries have chosen the four-year undergraduate program of study, as did the UK, Russia, Ukraine and other countries.

Especially large-scale reform of higher education is the implementation of academic credits similar to those of ECTS. European universities have various credit systems schemes. Although many universities of Ukraine have introduced schemes of assessing the progress of students (module-rating, rating), the binding them to the ECTS is still missing. It is the Bologna process that will be a powerful incentive for the revision of the principles and methodology for monitoring the quality of education by international standards, it will allow involving foreign experts, and positively affecting the quality of students' training.

This creates favorable conditions for solving the most important problem – employment of college graduates. Creation of the European space of higher education will contribute to the high mobility and competitiveness of knowledge and skills of Ukrainian citizens. In terms of socio-economic status, which is now Ukraine has now (unemployment, lack of jobs, low wages, and poor social protection), there may be a stalemate: increased migration from Ukraine to Europe in search of decent work, the leakage of intellectual assets from the country.

Therefore, the solution of educational problems in Ukraine in accordance with the Bologna agreements requires intensive development of production, creating a significant number of new jobs, provision of youth with work in accordance with Ukrainian legislation. Education in Ukraine can and should be cost-effective, highly efficient and competitive. These are demands of time and the real needs of our society.

The study of problems of employment of college graduates has revealed a number of serious negative trends showing a very rapid build-up and deepening of contradictions and imbalances in the development of the education market and the labor market. Firstly, it is clearly seen in the year-to-year reduction in the number of graduates employed immediately after graduation. Secondly, the lengthening of the period of time up to 2-3 years, during which there is an employment. Thirdly, the quick increase in the proportion of graduates seeking jobs by themselves (in many institutions this figure has already reached 100%) and the rapid decline in the number of employed by assignment.

Thus, the innovation processes in the economy and social life of any society are responsible for a kind of a revolutionary situation in education too. The objectives of professional education are clearly determined: training professionals who are able to perform successful professional activities that will be possible only through the organization of appropriately oriented educational process. Solving this problem is the greatest difficulty of the task: it is necessary to master professionally-oriented activities and appropriate knowledge system.

In recent decades, the world is undergoing intensive processes of arising of a new educational paradigm, which will replace the classic one. Despite the complexity of the process, which began on the border of XIX–XX centuries, the differences between classical and new paradigms are reduced, generally speaking, to a change in the fundamental concepts of man and his development through education. The construction of such training activities that would ensure realization of the objectives of the professional training, is only possible in the transition from an informative type of training to the learning, allowing to identify and develop cognitive and creative abilities of students, their independence, and to promote development of the qualities needed for a successful professional career.

What are the most pressing problems of practical updating and development of native education at the turn of the second and third millennia? First of all, this is a serious change in the objectives of the educational system, the transition from the knowledge-centered organization to a humanistic person-centered orientation to development and self-realization of essential powers, abilities, and talents of a person as the main goal of education. Such a shift in priorities does not mean abandoning traditional values. The system of knowledge and ways of life, the quality of knowledge (completeness, depth, systematic, flexibility, awareness, and efficiency) remain the foundation of the educational process. It is only that knowledge itself is not the ultimate goal and the result of training or self-development.

The same can be said of the relationship of social and personal orientation of education these are relevant educational objectives included in the educational process. Personal orientation does not displace the social orientation of education, the formation of the desire to serve society and the state, sense of duty, collectivism. It only requires that a person should enter a social process as a developing, socially stable and at the same time mobile, free, responsible, and creative personality. Therefore, the overall orientation of modern education can be defined as social-personal or personal-social, which ultimately coincides with the classical tradition of education (A. Disterveg, I. Pestalotsti, D. Pisarev K. Ushinsky et al.).

The second major change in the educational strategies is associated with a significant expansion of the content base of education. If until recently the main content of education was understood as the system of scientific knowledge or gaining the basics of scientific knowledge and skills, now the basis of education embraces all domestic and world culture, that is, all the achievements of mankind, contributing to its progressive development. This turn, however, significantly complicates quite complex procedures of selecting the content for school and higher education (I. Lerner, M. Skatkin, V. Lednyov, et al.).

The transition of the education system on the position variability of educational programs and diversity of the types of educational institutions is very important. For many years, the country has had standard, uniform, identical for all training programs, stable textbooks and curricula, strict types of regulated institutions. Now students receive real possibility of selecting the type of institution, and the level of educational programs. Although variability, freedom of choice is limited by the scope of uniform educational standards and qualifications (requirements for appropriate educational results at the end of a stage of education), as provided by the Law of Ukraine "On Education."

The nature of modern education, its problems and needs are determined by the trends as more focused on regional and ethnic peculiarity, a gradual shift to non-traditional teaching methods, the active using a psychological educational assessment and many other factors. Very serious problems now facing education are the problem of determining the timing of the systematic school education (6-7 years), the total duration of the primary and full secondary education.

The situation is complicated by emergence of educational services, by partial transition, especially in higher education, to a paid education. Quite actual and inherited from the past decades, there is an acute situation about health problems of students. According to a medical research, 40–50 % of healthy children enter school, and by the end of study the number of healthy students falls to less than 10 %. One of the factors of chronic ill-health is overload of students, especially noticeable in such educational institutions as high schools, lyceums and colleges.

These and many other issues have to be addressed to in the process of innovative development of the education system, curriculum development, selection and improvement of technology, optimizing the educational environment. And not only and not so much the leaders of the education system, the compilers of national programs and the authors of textbooks solve them, but many teachers-practitioners working directly at the school, college or university. The study of the theory of learning gives them guidance, helping to find points of support and determine the main directions of work, but it is important to understand the status and trends of development of educational practice, the processes that occur in it. Acquaintance with the experience of creatively working teachers and institutions gives some examples of activities but the main ideas and achievements are born in the teacher's own creative experience which forms his pedagogical thinking.

*The innovation process is the process of improving educational practices, the development of educational systems based on new-introductions, or, more precisely, on the basis of enrichment, modifications of these systems based on innovative development and a partial change in the traditional objectives, content and means of education. The desire of novelty has always been the*

property of the process of teaching. Deeply innovative for his time, was the theory and practice of the great Czech educator Ya. Komensky, who laid the foundation for class-lesson system and generated the leading principles of mass education.

Innovative processes in pedagogical theory and educational practice have intensified in the late XIX – early XX century, when in connection with the rapid development of science and technology and social upheavals interest in social education, the issue of identity formation and the personality increased. At that time there were proposed and put into practice the theory of active pedocentrism and active School of A. Dewey, D. Kilpatrick's project method, the system of Free Development Training and Education of Maria Montessori, the school of Free Development of Rudolf Steiner and many other innovative theories, projects, and undertakings.

Quite rich tradition of innovation distinguishes domestic pedagogy and school. We can recall the comprehensive training and education (teacher education anthropology) by K. Ushinsky, humanistic school of joy by V. Suhomlinsky, the experience of labor education of S. Shatsky, pioneer theory and practice of education in the team of A. Makarenko and many others.

The merit of innovative teachers of 60 – 90s is that they paved the way to democratic change in our schools, strengthened its position in the human treatment and cooperation with children. These teachers tried to some extent to ensure anticipatory role of education in democratization of society. In addition, they proved the right of a teacher for creative research, for pedagogical experiment, for their own pedagogical system.

It was very fruitful and evolved following the quest for innovative teachers mass innovation movement of the last decade of the XX century, when there was a difficult, painful, but simmering turn to a market economy and democracy. However, this real movement to the new provided survival to our education in harsh conditions of social and economic crisis.

Thus, innovation activities have been carried out in many areas, concerning all aspects of the functioning of the education system, namely:

- Content of education in different types of educational institutions;
- Technologies, principles, methods, forms, methods and means of training and education;
- The organization of the educational process;
- Management of the education system.

It is on the basis of innovative processes that diversification (transition to a variety of types, levels, profiles) of education took place. Innovative character of education, the development of pedagogical creativity, humanization and diversification of education were clearly manifested in the creation of schools that at first were called alternative (i.e., opposite, opposing the traditional type of

school), and then received the name of author's. The term "author's school" began to be used from the late of 80's, when in fact in the history of education one can distinguish many bright author's schools (I. Pestalocci, R. Steiner, Ya. Korczak, A. Makarenko, V. Sukhomlinsky, A. Zahkarenko, E. Kostyashkin, etc.).

At the end of the twentieth century due to the radical changes that took place there began a new stage in the development of national education, which was going to meet the challenges of the time by building variable education. However, meaningful promotion of initiatives aimed at building this type of education requires not only administrative and legislative, but also extremely balanced scientific and educational support.

Today there are various points of view, the dominant among which is the understanding of the variability of education as a fundamental principle of the development of the modern education system and as a result, abandoning by educational institutions the unification and uniformity, typical for the Soviet system of public education in the past. A very popular understanding of variability when it is considered as a property, the ability of the education system to provide students with quite a few high-grade, high-quality and attractive options for specific educational paths, choices, opportunities. With this understanding the variability of education is oriented to ensure the greatest possible degree of individualization of education.

Comparing these widespread in the pedagogical environment points of view, it is easy to see that in essence they emphasize different aspects of the problem of constructing variable education. In the first case we are mainly talking about the state and regional decisions to open new-type educational institutions. In the second case we are talking about solutions that allow changing the format of educational activities implemented in the educational institution, in accordance with established diagnosis based on individual needs of students in various educational services.

Thus, the history of formation and development of variable education strongly suggests that the occurrence of a particular institution was due to actual manifestation of social needs. And in each historical period, an extended version of the new institution was created by creative efforts of many teachers who were aware of the need to solve just such a problem, even if it took decades.

In modern conditions, especially significant set of problems solution of which allows national education to develop appropriately and efficiently on the elective basis. Among them are:

- understanding of the historical experience of national education developing in line with the movement for diversity, while maintaining a common cultural basis;



- systematic disclosure of the concept of "variable education", which allows to identify the organic integrity of national education as a single socio-state system, formed by developing a set of educational institutions of various types;
- rapid identification of potential shaping capabilities of each type of educational institutions, which are the fundamental basis for the effectiveness of their operation.

### **Questions for self-control and verification**

1. Give the definition of "educational content".
2. What are the requirements of modern society to a specialist?
3. What is the essence of humanization of education?
4. When did the humanistic pedagogy appear?
5. What are the disadvantages of knowledge-oriented education?
6. What is the essence of activity-oriented approach?
7. What is the leading idea of the competence approach?
8. What is a culturalogical approach?
9. What are the benefits of student-centered approach?
10. What are the main key points of the Bologna process?
11. Is there any change in the educational process nowadays?
12. What are the basic principles of an innovative concept?
13. What is the essence of the variable education?
14. What are the challenges of employment in Ukraine and how are they solved?

## **1.2. Pedagogy of success as an integral personal-oriented approach to forming successful students**

### **1.2.1. *Pedagogy of success: the content and the main directions of its study***

The improvement of training and retraining of specialists is due to the conscious personal striving for a high level of competence and skill. This requires knowledge of the mechanism of success and the creation of pedagogical conditions for its formation. The study of these problems is made possible by the new and promising science – pedagogy of success. Pedagogy of success is the science of how to activate the inner world of a person, his unlimited possibilities, which he realizes through his entire life. The approach in the modern system of education is to ensure the identification and productive use of personal resources, enhancing personal potential, encouraging him to self-development and self-improvement, achieving success in life.

Categories of success and the success of human life are the subject of philosophy (F. Nietzsche, Charles Pierce, William James, S. Hook, E. Fromm,

and others), psychology (B. Ananiev, I. Bech, A. Bodalev, R. Burns, L. Vygotsky, A. Leontiev, K. Rogers, D. Mack Klelland, A. Maslow, H. Hekhausen, et al.), sociology (M. Weber, Emile Durkheim, K. Davis, T. Parsons, T. Sorokin, V. Yadov, et al.), pedagogy (A. Belkin, S. Goncharenko, M. Kondratyeva, A. Makarenko, V. Sukhomlinsky, G. Nikishina, K. Ushinsky, et al.), social work (M. Richmond, B. Tracy, N. Hill, V. Shadrikov etc.).

The most well-known concept of success:

*"Biological success."* The human desire to achieve success is due to congenital physical qualities of a person and is expressed not only in the possession of physical strength and speed of behavioral responses, but also in possession of more advanced thinking abilities, ability is oriented in an irregular situation, determination, activity, etc. This allows the personality to eventually occupy a higher status position in the group and society. Originally arisen in the early stages of the development of mankind inequality due to natural differences in people's physique, personality, etc. was unstable and did not lead to overfitting status. However, in time it started regulatory consolidation and the creation of the legal framework for the elevation of certain social groups in society. There appeared a division of society into rich, wealthy and poor.

*"Religious success."* Connection of wealth and success in life is formed on an ideological basis in the form of a religious concept of Puritanism or Calvinism, which became widespread in the United States and Europe. According to it, the main task of a man is to glorify God – not by praying, but by worldly affairs of his professional activities. Enhancing the glory of the Lord is the multiplication of wealth. The same positions are pursued by ethics of Protestantism, as described in the world famous work of Max Weber those "Protestant Ethic and the Spirit of Capitalism."

*"Pragmatic success."* The basic ideas of pragmatism as philosophy teaching were advanced by American philosopher, mathematician and logician Charles Pierce. Representatives of this trend are such American scholars as William James, John Dewey, S. Hook, English philosopher F. Schiller. Pragmatism is quite often referred to as the philosophy of deeds, actions, thus emphasizing its practical orientation. In this case, the only criterion of truth is success of any undertaking, deed, matter. As the purpose of human existence the pragmatism puts the welfare of the individual and the possibility of achieving wealth and happiness. The main hero of this philosophy is a man-dealer, energetic, able to act quickly, a sneak with the spirit of individualism, accustomed to rely on himself, achieving success. In general, the success of this strategy can be vital to characterize in one word – "to have." However, parallel to this strategy there developed other concepts that address the problem of how to "be" successful.

*"Existential success."* Friedrich Nietzsche, who proposed the idea of the "superman", can be considered the founder of this school of thought. Nietzsche's

superman is an independent, self-sufficient person, loving himself, accepting himself, understanding his desires and needs. The teaching of Nietzsche "About superman" was developed in Maslow's self-actualization theory. In his book "Motivation and Personality" he defines self-actualization as realization of the full use of abilities, talents and potential of the individual. In terms of A. Maslow, motivation of an ordinary man is the desire for satisfaction of basic needs (physiological, safety, social relations). A successful man is a man that focuses on meeting the needs of a higher level – the needs of development, namely:

- respect that includes both the need for respect from others, and the need for self-esteem;

- self-actualization or realization of one's potential opportunities and abilities, of self-importance, in understanding, comprehension and development of one's own *I*.

Based on the ideas of humanistic pedagogy, the man has internal embedded forces and the pursuit of success, and the task of pedagogy of success is to make a minimum impact, stimulating internal human capabilities. The purpose of upbringing in a humanistic pedagogy is to ensure that every pupil could be the subject of an authorized activity, free amateur person. It is a science the aim of which is to study a healthy creative individual. Thus, according to A. Maslow, a child's personality is unique, with unique value of originally pledged potential, fully contributing to its self-development. It is important to create the conditions to meet the emerging needs of the young person. In his turn, K. Rogers states that the Personality is uniqueness and value, it has the potential for self-development. The main thing is to strengthen the faith, trust in oneself, increase self-esteem by forming adequate ideas and attitudes to one's own *I* and towards others.

K. Rogers points out that in modern world characterized by constant change, you need to shift the focus in the process of study from teaching the doctrine, as a broadcast of information to the facilitation of meaningful learning. Here we have in mind facilitating and stimulating at the same time the process of learning for the student, i.e., the creation of intellectual and emotional environment and the atmosphere of psychological and pedagogical support in the audience. In developing such an atmosphere the education is carried out at a higher rate, and has a major impact on the lives and behavior of the student. This approach determines the position of the student in the educational process, it means the recognition of the active subject of this process, therefore, determines the importance of the subject-subject relations.

Fundamentals of pedagogy of success were laid by K. Ushinsky who wrote that mental work of a student, his successes and failures in education is his

spiritual life, inner world, and ignoring it can lead to tragic results. The child not only learns about something, learns the material, but also worries about the results of the work, expressing his attitude to what he can or cannot do.

K. Ushinsky came to the conclusion that only success supports a student's interest in learning, and it appears only when there is inspiration, born from success in the acquisition of knowledge. A child who never knew the joy of labor in learning, who was not proud of the fact that the difficulties were overcome, is losing the desire and interest to learn [205, p. 150]. Therefore, the first commandment of education K. Ushinsky felt the need to give children the opportunity to feel the joy of their labor, to achieve success in learning, to awaken in their hearts a sense of pride and self-respect for their achievements.

V. Suhomlinskiy also said that the methods used in educational activities, should arouse interest within a child to the knowledge of the environment – of the world, and the school should become a school of joy: the joy of learning, the joy of creativity, the joy of communication [195, p. 23]. It defines the main purpose of the activities of the teacher – to create a situation of success for every student. A. Makarenko, in his time, put forward the idea of "tomorrow's joy", referring to the prospects of development of the personality and of the team. Of great interest is the educational system, "school of life", created by Sh. Amonashvili. The author has developed and implemented at an experimental school a humanistic-and-personal technology, one element of which was the creation of situations of success.

Many modern scholars have also expressed the idea that students want to gain knowledge, experiences, need to learn, when they are driven by motives and interest, backed up by success. The main purpose of the pedagogical process is in the concept of A. Smirnov – the creation of conditions for the greatest possible development of a student's abilities, the formation of his inner mental world and confidence. The teacher should create a source of inner strength producing energy to overcome the difficulties, and the desire to learn.

One of the famous American scientists, a psychologist and educator William Glasser, who develops teaching methods of communicating with children, also believes that success should be available to every child. He deeply studied the problem of satisfaction of a child's underlying psychological needs in a learning environment. Scientists believe that if a child succeeds at school, he has every chance of success in life.

The main categories of pedagogy of success are the words "success", "successful life", "the situation is success", "success", etc. However, the very notion of success is very ambiguous. S. Ozhegov interprets success as success in achieving something, and public recognition. In the "Short explanatory dictionary of the Russian language" success is seen as a positive result of any

business to achieve anything, and the concept of "successful" – one that gives positive results, ended successfully.

Modern scientists have given the following definition of success: "Success is a constant implementation of the goals that we set for ourselves, and which are extremely important to us. Success is not only the result but also the process of moving towards achieving it. This is the development of human capabilities, disclosure of his potential "[173, pp. 8–9]. Success is a multi-dimensional concept and the mechanism to achieve it includes a number of factors.

Firstly, the success is what people are gaining by virtue of their own, but inherent potential, due to their activity. It's not so much a consequence of the extraordinary talent and ability as the ability to apply them in practice. Success does not mean that we have to do something special. This means that we must do the same as the others, but exceptionally well.

Secondly, the success is a movement towards a set for the purpose as a result of our beliefs, values, abilities and habits, which lie at the heart of this movement. It should be measured by comparing, which were the goals and objectives of a person, and what results he achieved in accordance with them. It is important to understand that necessary condition for the development of hidden possibilities of a person is only an objective that is important for him/her.

Thirdly, success is related to the disclosure of a person's potential in the process of development and self-development. This process requires from the individual productive activity, which is expressed in constant adjustment of the actions, behavior, actions, which in turn calls for self-awareness and self-evaluation, self-control and responsibility.

Fourthly, an important component of success is mastering the skills of human relationships. This includes the communicative competence of the person, an effective strategy and tactics of personal influence, conflict management skills of successful leadership, and other factors that influence the relationship between people [172, p. 8–9].

From a psychological point of view success, according to A. Belkin is experience of states of joy, satisfaction from the fact that the result to which the person sought in the activity, coincided with his expectations, hopes or surpassed them. On the basis of this condition, stronger motives of activity, changing levels of self-esteem, self-respect are formed. When success is sustainable, permanent, may start some sort of reaction it releases huge, hidden until then the possibility of the individual [15, p. 28].

From a pedagogical point of view, success is a significant achievement of results in the activity of both a single individual and a group as a whole [15, p. 30]. In pedagogical terms success may be the result of prepared tactics of instructor or the family. The basis of expectations of success is the desire of

a student to gain approval, the desire to assert his *ego*, his position, beliefs and values.

Success is always included in the chain of actions, it is not an end in itself. Rather, it serves the human condition of satisfaction with life, which in turn, becomes a nutrient medium for further action, self-serving purposes. This condition gives new stimuli to growth, which does not necessarily have to be associated with the activity, and may be inherent to the emotional maturity of a person or some aspect of his development of the potential which means in equal measure his success in life.

Therefore, the most important task of education is to encourage learners to active work on their own development and self-improvement. In this regard, P. Blonsky saw the task of the teacher as being not so much to provide education and training, but how to develop the ability to self-education and self-upbringing. "We need to ... – he wrote – to educate someone who can create his own life, who is able to self-determination. To educate oneself means to self-determine, and education of the future creator of a new human life is only a rational organization of his self-education" [20]. It is safe to assume that properly delivered upbringing is the skillful internal stimulation of activity of a growing personality to work on oneself; it is motivation to his/her own development and improvement.

For conceptual ideas of pedagogy of success is also important the personal approach as the most important principle of psychology, taking into account a person's identity of individuality in the child's upbringing. This approach determines the position of the child in the educational process and recognizes him to be an active subject of this process, therefore, implies the importance of determining the subject-subject relations. It should focus on student development and self-development, the emergence of his personality, taking into account individual characteristics, interests and abilities. The representatives of this approach argue that the educational process should be structured in such a way that everyone gets a chance to fully develop, which allows self-fulfillment and success in life.

In this case, the priority is to support the internal capacity development as a key element of the success of pedagogy. So, A. Andreev wrote that success is one of the factors that can improve the relationship between children and adults. This is a process that helps children to believe in themselves and their ability, to avoid mistakes, failures in children support. The author says that in order for a pupil to achieve success, teachers and parents will have to change the way of communication and interaction with him. It is important not just to pay attention to the mistakes and bad behavior of the child, but to focus on the positive side of his actions and his encouragement. [7].

At present the problems of pedagogy of success are studied the most extensively within the school system. So, these issues are dealt with on the basis of the results of the survey, "The life of a successful person," conducted in May 2005 among the graduates of Moscow school number 792 [225]. The first survey question offered students to choose synonyms for the word "successful." For the overwhelming majority of children (72 %) "successful" means "confident", 59 % believe that a successful person is the "master, a professional" 36 % – "educated" and "responsible", 32 % – "physically healthy" and "optimistic", 23 % of students completely associate "successful" with wealth and intelligence, 5 % – with beauty, honesty and talent.

In answering the second question, high school students were invited to numerate qualities of a successful person. The result is in the next picture is (Table 1.1).

Table 1.1. – Qualities of a successful person

Place	Qualities
1	The ability to set and achieve goals
2	To have their own opinion
3	Self-confidence and confidence in the future
4	The presence of a good education
5	Inner comfort
6	Professional self-realization
7	Having a safe family
8	Having lots of friends
9	Promotion of the corporate ladder
10	Material prosperity
11	To be the best in everything
12	The attractiveness and success with the opposite sex

To the question: "What should I do to feel like a successful person" 77 % of students answered that it needs to implement their human abilities, 55 % – to rise above his social environment, a career, 50 % – to have material prosperity, 23 % – to stand out among all, to have something that others do not, and 14 % – to be better than others, and only 5 % – to become famous and glorious. During the study 77 % of the graduates considered themselves successful, unsuccessful – 14 %; 9 % of the students found it difficult to answer this question. As for their success in the future 64 % of graduates were sure of it, and 36 % found it difficult to answer this question. Answering the question of what their success depended more on in the future, the eleven-graders from the options unanimously chose the answer "on me, my commitment, activity."

Thus, the model of life successfulness, which is selected by graduates today, is the following: a successful person is, first of all, a confident professional. He knows how to put and achieve goals, always has his own opinion, is sure of his future, has a good education and is responsible for his actions. At the same time, a successful person does not want to purchase any objects, it does not matter where he buys clothes. The main thing for him is to realize his talents and abilities. Although there are guys who do not consider themselves to be successful in the present and who are not sure of their success in the future, they firmly know that their success in life is in their hands, only their own sense of purpose and activity will help them in self-realization.

One of the most important human needs is success in the meaningful for him activities. The leading students' activity is learning. It can be stated that cognitive demand and the need for achievement of success are two essential components, which largely ensure the progress of learning activities. However, as noted at the time by a famous psychologist L. Vygotsky, "our child both knows and can and is able to, but his problem is that he does not want to" [34, p. 168]. It is possible to agitate, to capture, to develop interest, but do not force. Only having liberated a pupil from fear and "compulsoriness", you can call in him conscious, interested attitude to learning. Only the knowledge, that has become pupil's personal need, can turn into a moral value. A pupil cannot know all that he is taught, and it's necessary to acknowledge his right to choose the learning material.

The teacher should organize the educational process in such a way as to meet the pupils' natural needs in the knowledge of the surrounding world, in communication and self-realization, to ensure receipt of positive emotions. Such training will be bringing pupils to enjoy and desire to learn, it will grow over time and become a motivation of success. Teacher's explanation of his actions and motives, and their acceptance by pupils develops motivation and encourages the desire to achieve their goals.

The other side of the process of achieving success in life is the concept of school failure. Unfortunately, academic failure is a chronic, "perennial problem" at school. Many famous didacticians paid a very close attention to it. And in the works of a number of educators and psychologists (V. Cetlin, Yu. Babanskiy, A. Helmont, P. Borisova, L. Slavina, N. Menchinskaya and many others) it is considered that poor progress is not only a manifestation of the lack of effectiveness of training, but also a factor that has, in turn, a negative impact on the formation of personality. On the one hand, poor knowledge is the result of the teaching process, on the other hand this negative forming factor requires the study of the essence.

The scale of this phenomenon has become so large that it starts to appear as an important factor of bad social conditions. Synonymous with the word



"failure" is the concept of "lack of success". Colossal in numbers contingent of young people with low self-esteem and lack of confidence in their own governmental forces are unable to effectively build their line in personal and professional life, actively and productively to adapt to the demands of society. These problems are becoming extremely urgent after graduation when choosing a future course of life and adaptation to the new conditions of life.

The literature offers a variety of options and ways to regulate unfavorable factors of education. However, in modern approaches, initially focused on improving the quality of education and effectiveness of the educational process, the questions concerning formation of self-awareness of the learners, of realizing their self-image, which promote a personality's self-awareness, self-development, and self-improvement, do not find adequate scientific and theoretical understanding and applicable solutions.

### ***1.2.2. The role of self-evaluation of personality in the formation of its success***

One of the fundamental features of a person is that everything that happens to him/her is subjected to continuous psychological self-assessment of his actions, decisions, determining of personal significance. Positive evaluation gives him an extra internal activity, contributes to a belief in himself, his strength, stimulates and strengthens the desire to further the achievement of the goals.

The negative assessment has diametrically opposite influence of not stimulating the activity of an individual, but on the contrary, sharply reducing his motivation and purposefulness, and forms a negative perception of the environment. This leads to a deformation of the personal basis in a man, significantly narrowing the range of possibilities for self-realization. Reduction of self-assessment in such cases becomes a logical phenomenon. In this regard, it is interesting to consider the research related to the deployment of a detailed picture of the formation of self-assessment of its process characteristics.

The objective existence of the relationship between self-esteem and lack of success has led to the emergence of a variety of different psychological and pedagogical explanations for this phenomenon within the framework of behavioral, cognitive, psychoanalytical, humanistic, and other activity-based pedagogic systems, which reveal different aspects of this relationship.

*Behavioral* pedagogy centers its attention on the formation of socially approved behavior patterns (pattern (in English) – a sample model, a template, a stereotype), finding it necessary to form within a student stable behavioral skills of solution educational and life problems. Representatives of this trend, in fact, refuse to consider the features of the inner world of a learning person. For them, the concept "personality" is nothing more than harmonization of

behavior stereotypes, and external educational impacts when properly executed, are in their opinion all-powerful. The emergence of the phenomenon of negative self-esteem in the behavioral pedagogy is seen as a fault in the organization of the educational process. This direction initially focuses on the formative impact of the external environment. Scientists believe that all depends on the teacher and on what kind of child we want to see.

A different understanding of the influence of the factor of failure on self-representation in contemporary cognitive pedagogy is based on one of the anthropological concepts, which reduces the nature of man to his intellect, rational abilities. *Cognitive* pedagogy, giving priority to the educational process, cognitive development, and development of his mental instincts and abilities, has the dominating goal to prepare a person intellectually so that he could adapt to life in a rapidly changing environment.

For representatives of cognitive pedagogy the formation of self-assessment is a purely intellectual phenomenon. The study of features of the formation of pupils' cognitive sphere allows supporters of the cognitive pedagogy to claim after Kohlberg, Piaget and other authors, a rigid system of phases in development of their intelligence, in full compliance with which pupils' self-esteem is formed, which for teachers of cognitive orientation is nothing but a judgment about himself. And according to them, judgment is a product of logical operations, which child performs differently in different ages. That's why representatives of cognitive pedagogy consider it appropriate in the early stages of schooling to give pupils advanced confidence, evaluating their learning outcomes softer. At senior levels of education the focus is made on formation of understanding of utmost importance of school education for a successful life.

*Psychoanalytic pedagogy* is another approach to the problem of lack of success. In the perspective of its attention are not behavioral and cognitive aspects of students' life in education, but deep psychic experience of the subject teaching, arising in the context of its interaction with other subjects of education. With all the differences of approaches, representatives of psychoanalytic pedagogy agree that a student is a complex biopsychosocial being which is led in the majority of cases by unconscious impulses emanating from its natural mental depths.

From this perspective, the problem of the formation of the student's self-esteem is solved. School lack of success actively imposes its mark on the formation of student's self-assessment. He has a feeling of helplessness in the educational requirements, which inevitably leads to unease and to psychological anxiety which, in turn, causes the appearance of negative aspects in the image of his ego (his *I*). In this case, the child may develop a psychological defense, allowing him to ignore school failures completely and compensate for his

weaknesses. As a result, the child's self-esteem may be overestimated and inadequate.

Modern *humanistic pedagogy* recognizes the original uniqueness of each student. Its members believe that each student has a set of unique capacities and potentialities. Mental originality is determined by the formed relationships to the natural world, to society, to himself. The educational process should not, in their opinion, ignore any biological or psychological nature of the student. The main task of humanistic-oriented educational process is to create pedagogical conditions in which students in accordance with their uniqueness and originality with the help of teachers will be able to unleash their potential in gaining knowledge and define the line of their personal and professional fate.

The humanist pedagogy considers all internal life of student to be dependent on his self-evaluation. "Self-assessment," write its prominent representatives K. Rogers and J. Freysberg, "is the most important means by which self-teaching also becomes a responsible teaching" [171]. They state that modern schools are pressed by formalism and this leads to the neglect of the true goals of educational activities. Low self-evaluation, forming in such learning, blocks the path to a student's self-realization.

Pedagogy in our country, as noted earlier, is based on the fundamental importance of ongoing activities of participants in the educational process. Treating learning activities as forming a special integrity, teachers and psychologists explore in detail its components: motives, objectives, actions, operations. This vision enables to make the object of study many of the phenomena of internal life of the subject of study: his personality, his thoughts, abilities, inclinations, imagination, etc. Naturally, in this series the self-esteem is included and interpreted by scholars as a special mental new formation.

In this case, by a student's self-evaluation they mean how he evaluates himself, his abilities and qualities. Assimilating in the process of training and education certain norms and values, the child begins under the influence of evaluative judgments of others (teachers, peers) to treat in a certain way both the real results of his learning activities and himself as a person. In this way a student in the process of education forms an attitude to assessment his abilities, becoming one of the main components of self-evaluation of both the achieved results and the future ones.

For all the variety of scientific approaches, they are united by generalized conclusion, the essence of which is that the lack of success is to a large extent the result of high or low self-esteem of a person. There exist a number of different, sometimes even conflicting explanations of how the training influences the formation of student's self-assessment of himself. But any scientific concept does not deny the existence of the objective presence of this link. So, correlational dependence of the facts of life failure with the factor of negative

self-evaluation is an established scientific fact. However, the questions connected with a detailed picture of the formation of negative self-evaluation and of its process characteristics haven't been investigated enough so far.

We can highlight a few sources of self-evaluation, which change their importance at different stages of a person's development:

- assessment of other people;
- the opinion of the reference group;
- comparison with the others;
- comparison of the real and the ideal *I*;
- measurement of one's performance results.

Thus, self-evaluation is the attitude of an individual to himself, which is added gradually and, to some extent depends on the approval or disapproval of others, which determines an individual's belief in his importance. This is a personal judgment of self-worth, which is expressed in attitudes peculiar to the individual. Positive or negative evaluation of oneself reflects the degree of development of the individual's self-esteem, feelings of self-worth and a positive attitude towards everything that is within the scope of his *I*. Therefore, low self-evaluation involves the rejection of oneself, self-denial, has a negative attitude to one's own personality.

There are three points that are important for understanding of self-evaluation. Firstly, an important role in its formation is played by comparison of the real and the ideal *I*, that is, with the idea of what a person is and what he would like to be. The second factor is related to social reactions of a given individual. In other words, people tend to judge themselves as, in his opinion, he is estimated by others. This approach to understanding of self-evaluation has been formulated and developed in Cooley and Mead's works. Another look at the nature and the formation of self-assessment is that an individual evaluates the success of his actions and relationships through the prism of his identity. The individual feels satisfied not because he's just doing something well, but from the fact that he chose a certain thing and it is this thing that he does well. It should be emphasized that self-evaluation, regardless of whether it is based on a person's own judgments of himself or on his interpretation of other people's judgment of him, it is always subjective.

Thus, the lack of success as a factor deforming the personality needs an urgent search for operational decisions that will ensure the efficiency of the education system. A way out of this situation should be associated with the identification of the positive factors that are able not only to neutralize the negative impact of failure of training, but also become the basis of a successful educational process. An initial methodological way to solve this problem may be to identify the forming factors that can support the process of productive socialization of each student and their attainment of success in life.

In this regard, the concept of "managed development of education" by Ya. Turbovsky has a particular importance [201]. According to it, education is a creative activity that allows to raise questions about scientifically-grounded changes to the content of educational work. This concept allows to approach the problem of overcoming lack of success. The methodological approach to education as a project-created variative reality makes an opportunity to use the potential that each institution has or may have in the reality.

Such educational process can eliminate the frequently encountered phenomenon of the student's assessment of himself as unsuccessful and is called to build in him a sense of experienced success and optimism. With this approach, the solving of the problem of lack of success is taken into the sphere of project-formed relationships, initially defined and purposefully organized by the school and focused on the relationship of the pupil to himself and to the world in which he lives and realizes himself.

The paramount in this case is not a fixed academic progress as determinant of quality of training, but forming of relationships that are built on the provided for each pupil opportunity to prove themselves, to experience feelings of achieved success. This gives us confidence in one's strength, becomes a means of formation of optimism as the fundamental basis of perception of the world. Creating reproducible situations of experienced success, a school in this way sets the foundation of moral and spiritual stability of a person ready for self-actualization and able to withstand the odds of life.

Thus, the problem of overcoming the lack of success can and should be solved on the basis of created by school relations, providing formation for each student an optimistic view on everything that occurs, to life as the supreme value. The main objective is the organization of potentially possible set of activities that gives every student an opportunity to experience a sense of personally made success [28]. This should be a fundamental basis of forming an active, optimistic personality entering life. The research and extensive experience of Moscow school number 792 is a good reason to confirm the efficiency of this conclusion [28] which took place under the pedagogy of success in the first half of the twentieth century.

### ***1.2.3. Technologies and teaching methods necessary for a personality success formation***

To achieve the set goals in the educational process it is necessary to develop its organization-and-content model in which on of each stage there should be created conditions for a successful, social optimism of pupils, which requires the use of technologies creating situations of success. This involves the design and implementation in practice of such a teaching system that would be adequate to cognitive, emotional and volitional states of the pupils.

In this regard, there is an interesting concept of "pedagogical technology" existing in teaching techniques that can be used as a technology to succeed. To do this, we should look closer at the definition of the essence of the basic characteristics of educational technology as a system.

In psychological and educational research there is no common point of view as for the use of this concept. The fundamental definition of educational technology is given by S. Goncharenko: "Technology of education is a common understanding of a systematic method to create, use, and determine the whole process of learning and knowledge management with the use of technical and human resources and their interaction, which aims at optimization of education" [38].

Valuable for teaching practice is a definition which is given by well-known educators, I. Prokopenko and V. Evdokimov: "Under the teacher education technology training is understood the development and use of a system of principles of organization of educational process on the basis of the latest achievements of science and technology. Educational technology acts as a teacher of education system in which the use of teaching methods increases the efficiency of the educational process" [161]. I. Zyazyun and V. Slastenin associate with this concept its implementation technique.

Currently, it is possible to name a lot of unique teaching technologies: technologies based on personal orientation of pedagogical process (Sh. Amonashvili's personal technology, the system of E. Illyin, pedagogy of cooperation); technology of self-education by M. Montessori; technology of individualization of training by V. Shadrikov; technology-oriented formation of a creative personality of the teacher (V. Zagvyazinsky, M. Potashnik, Yu. Lvov, I. Podlasy, L. Prokopenko S. Soloveitchik, N. Schurkova); technology based on increasing and intensifying the activities of scientists (game technology, technology of problem-based learning, etc.). All they are technologies of self-forming and self-development.

According to I. Zaitseva, as a feature of educational technology can be called a complete sequence of stages and steps, namely:

1. Setting goals and their maximum refinement.
2. Strict orientation of the whole course of training on educational purposes.
3. Orientation of training purposes and along with them the entire course of the study on gaining results.
4. Evaluation of intermediate results, correction of training, aimed at achieving of results.
5. The final evaluation of the results [61].

Abroad a lot of attention is paid to the creation of new educational technologies, but they should be used creatively, and not copied blindly. An

example of the creative realization of scientific research adaptation of the modular technologies designed to use the positive aspects of lecture-seminar course training system is used by teacher-innovators of the Kiev National University. The basis of the experimental training is the experience of higher education institutions of the West. Another option of modular block system of training is the technology of intensive training (authors – scientists of Kharkov Pedagogical University L. Bilousova, T. Belyavtseva, L. Ponomarev, T. Solodka).

Our studies provide a basis for conclusions that technology of education as a pedagogical system motivates the successful education of students using student-centered approach. However, none of educational technologies is able to generate automatically the necessary knowledge for professional work and skills that future professionals need to master. It is important to know which methods of learning activities and ways of organizing the educational process can effectively influence the formation they need for self-development and self-improvement, as well as motives of achievement.

To do this, it is necessary to consider in detail the content of teaching methods as a category of didactics. A significant contribution to the theory of methods in progress training are made by the scientists S. Arhangelsky, S. Goncharenko, M. Danilov, B. Esipov, S. Zinoviev, B. Korotyaev, M. Makhmutov, I. Lerner, V. Palamarchuk, M. Skatkin, S. Shapovalenko et al. S. Goncharenko defines the methods of training as an orderly way of interconnected activities of the teacher and the students, focused on solution of educational problems. Proper selection of methods in accordance with the objectives and content of education and age of students contribute to the development of their cognitive abilities and skills using the acquired knowledge into practice, preparing students for self-mastery of knowledge shapes their worldview.

Scientists studying this issue concluded that a technology of education as a pedagogical system motivates students under the condition that their needs and motivations are the focus of each teacher, and the student is considered as the subject of the learning process. A person is enriched with knowledge only when this knowledge means something to him. One of tasks of school is to teach pupils in a funny and lively form, so that the child himself wanted to study and remember. The main mechanism of solving this problem is to create a situation of success in the learning process. *The situation of success is a targeted specifically organized set of conditions that allows to achieve significant results in the activities of teaching a person, accompanied by positive emotional and psychological experiences.*

This concept was proposed in the 1980ies by a group of scientists, who were led by A. Belkin. They firmly believe that if a child is deprived of belief

in themselves, it is difficult to hope for his success in the future. One wrong word, one wrong step of a teacher can fracture a child to such an extent that no educational tricks can help later [15, p. 81]. Experienced feeling of success contributes to the development of a person's self-confidence, improves his self-evaluation, and develops a sense of self-worth. It can fundamentally change the status of the student, change the rhythm and style of his life, relationships with others. Thus, success provides a balance between expectations surrounding the individual and the results of his operations.

A correct point of view of V. Slavenin is that situation success stimulates learning activities. As a reliable way of creating such a situation he considers a differentiated approach to the assessment of the content of activities and the nature of assistance to pupils in the course of learning. On the basis of this state, new more powerful motives of activity are formed, levels of self-esteem, self-respect change. In the case where success becomes stable, permanent, there may start a sort of reaction of liberating huge, until then hidden abilities of a person, his reserves, his potential opens. [189].

Also, the situation of failure is necessary as well: it is a subjective emotional experience of dissatisfaction in the course and as a result of activities. It can not be viewed in isolation from the situation of success, but only as a stage in the transition from one success to another. It's hard to overestimate the catalytic role of failure in a number of situations. Continued success may decompose personality, while failure may form his best qualities. One without the other does not exist, or should not exist, to put it correctly. According to A. Belkin, the joy of success should not cause excessive complacency and fear of a possible defeat and should not paralyze a person's will.

In order to achieve the desired results a variety of situations for success are used: "Removing the fear", "Personal exclusivity", "Evaluation", "Advancing", "Adding a motive", "Teacher suggestion", "Focus on the other," and others. Instructional techniques of pedagogy of success fit organically in ideas of developmental, student-centered education. Huge role in this process plays the integration of primary and secondary education, student self-government and various communities within education institutions. The development of attitudes for success involves acquisition of experience in joint efforts to achieve educational goals.

The goal of any pedagogical system is to achieve self-realization success by both students and teachers. On the basis of the developed program of individualized educational assistance we set goals and objectives of a given situation success, the choice of forms, methods and techniques that would trigger potentially existing positive personality traits of adolescents. G. Nikishin, L. Chuprinina proposed a list of personality traits that promote or hinder



attainment of success that are presented in Table 1.2. These qualities form the basis of the program of designing educational content, monitoring educational achievements of high-school students, as well as psycho-pedagogical support of the educational process [142].

In 1989, at school number 56 in Leningrad (St. Petersburg) there started an experiment to create an educational institution that would implement in its work the teaching program "Pedagogy of Success" [142]. According to its authors, the pedagogy of success is a combination of training and personal achievements based on humanistic principles. In the course of the theoretical and practical research the team created conditions for a high school students' adequate development through meeting their needs for self-fulfillment and self-affirmation.

The pedagogical team was building their educational system from the position that human development needs constant stimulation and guided pedagogical reinforcement. Therefore, teachers consider the creation of situations of success a necessary condition of the process of training and education, a way to form and develop motivation of achievement for students. They viewed achieving success as a specific result recognized as important for an individual.

Table 1.2 – The qualities of the personality contributing success

The qualities of the personality contributing success	The qualities of the personality impeding success
Internality – high responsibility for life situation, considering oneself, one's actions as a source and the reason for success and failure.	Externality - the process and the outcome of the external factors as causes and sources of one's successes and failures.
Medium or high level of need for achievement.	Low level of need in achievement.
Medium personal anxiety.	Low or high personal anxiety.
Adequate self-esteem.	Overestimated or underestimated self-esteem.
Human values-kindness, humanity, justice, compassion, respect for others	Selfishness, suspicion, closedness, orientation at one's own <i>I</i>
A high level of physical and psychological health.	A low level of physical and psychological health.
Medium or high level of communication skills.	Low level of communication skills.
Abilities of self-evaluation and reflexive activities of students.	Low level of reflexive and evaluative skills
Integrated quality is social optimism, the desire to achieve success.	Integrated quality is social pessimism.

The teacher directs and assists students in their self-development. Power for the realization of their personal and professional potential and the pursuit of further self-improvement can be received by teacher through his success, as expressed in the achievements of his students. An example is the video tutorials, lessons-trainings in identification of achievement motivation, open classes with further analysis and self-analyzing, cognitive-educational activities, etc.

Pedagogical staff of Kostroma school number 25 continued to work in this direction with the new results of innovative activities in the educational systems, obtained in recent years. It is known that the belief in one's strengths is an important condition for the creative development of a person, which is impossible without obtaining experience of achieving success. By organizing situations of success and a cycle of various activities in which everyone may show his worth, teachers assist pupils in self-development. In connection with the set tasks, at school they develop psycho-pedagogical support of the educational process, which ensures conditions for success of the subject of training, the formation of his social optimism.

According to the study, there was observed the dependence of learning outcomes of the education on creation of a situation of success. Thus, virtually in all subjects there was improvement of quality of learning, but to varying degrees. A slight improvement was observed in such subjects as manual (labor) training and reading. The sharp jump in the quality of learning occurred in mathematics and Russian language (traditional curriculum). In subjects such as physical education and natural history significant changes have not occurred as they have always been the most loved by students and accompanied by high results. Thus, the authors concluded that the development of targeted educational situations of success in educational space is a way to enhance the individual potential of learners. An important role is performed by the teacher.

In this model, the idea is revealed, according to which the development of human in the society, the transformation of the social into the individual occurs in the process of joint activity of adults and children. These principles are also implemented in the new democratic direction – pedagogy of cooperation, which in some sources is called scientific pedagogy of toleration, and the scientist-teacher I. Zyazyun called it "good pedagogy" [70]. Professionally-pedagogic partnership is a system of organic socio-psychological interaction of the teacher and students, the content of which is exchange of information, knowledge of each other, the organization and the correction of their relationship in a team, sharing the roles, common experience.

According to I. Kharlamov, it is possible to form students' need for training only through friendly relations between teachers and students based on respect and rigor. This point of view is supported by S. Smirnov. The well-known educator pays great attention to creating a friendly atmosphere and mutual

assistance in the execution of the tasks, equal treatment for all students and a fair assessment of progress in learning activities.

Organization of cooperation between teacher and students, the creation of relations of trust and mutual understanding, experience of joy and success intensify the learning process, forming its participants' self-confidence and respect to each other. It allows the teacher to focus on student's success and create a special situation; they contribute to the experience of emotional recovery. Such cooperation contributes to the personal growth, as well as an opportunity to realize one of the main objectives of educational process to help realize one's potential and to believe in oneself.

It is well known that the necessary conditions for success in any activities are spiritual health and emotional well-being. "The sphere on the intellectual life is closely fused with the moral sphere, and each failure in education is perceived as bitter harm", V. Suhomlinsky wrote. Taking this into account, he believed that the main task of the teacher is to continuously develop in children a positive sense of satisfaction with learning, which in its turn should produce and establish emotional state – a passionate desire to learn [196, p. 588].

To do this, the teacher has to organize the educational process so that to satisfy the pupils' natural need in knowledge of the outside world, communication and self-realization, to ensure that they receive positive emotions. The experience of joy, success is the phenomenon that causes a feeling of self-sufficiency, psychological comfort, and emotional stability. Deliberately creating such a situation, the school lays the foundation for ethical and spiritual strength of personality that can resist the ills of life. For this it is necessary to encourage students to active work, creating an environment that will give them an opportunity to experience the taste of victory over difficulty, to form their belief that they can fly, that they own the unlimited possibilities of the spiritual and physical growth. At the same time understanding the motives of their actions encourages learners to set goals and to spare no effort to achieve them.

Typically, a child comes to school positively motivated. To keep this attitude to school and classes, teacher's efforts should be directed to the formation of stable motivation to succeed on the one hand, and the development of educational interests on the other. This will increase self-esteem and self-confidence, thus helping students to establish themselves in feasible for them activities. Gaining success in learning activities is complicated by several factors, among them the lack of knowledge and skills of the student, psychological and physiological characteristics of his development, poor self-control, etc. Therefore, there is a need in creating a situation of success for subjective experiences by pupils of satisfaction from the process and the result of the work done by themselves.

Technologically, this assistance is provided by a number of operations that are carried out in the psychological atmosphere of joy and approval, created by

verbal and non-verbal means. In this case, some words of encouragement and soft tone, melody of speech and the correctness of references as well as an open attitude and a friendly facial expression, create in their combination a favorable psychological background to help the child cope with given tasks. The following process steps for creating situations of success are given by the authors [142] (Table. 1.3).

Table 1.3 – The operations of creating situations of success

Operation	Function	Voice paradigm
1. Removal of fear	Helps to overcome fear, uncertainty in one's strength, timidity, fear of activity and evaluation of others.	"We try everything and keep looking for, only in this way something can be done", "People learn from their mistakes and find other solutions"
2. Advancing the successful results	Help the teacher to express his firm conviction that his pupil will cope with the task. This, in its turn, makes the student more confident of his strength.	"Test work is quite easy, this material we've looked through", "You must succeed", "I have no doubt in a result"
3. Instruction (hidden) of the student as to methods and forms of making activity	Helps the students to avoid defeat. Achieved by hint or wishes.	"Perhaps the best way to start with ...", "In carrying out the work, do not forget about ..."
4. Introduction of the motive	Shows to student what for the activity is taking place, who will be fine after it.	"Without your help, comrades cannot cope"
5. Personal responsibility	Identifies the importance of the student in the forthcoming or present activity.	"Only you could do it...", "I can trust only you", "I cannot ask anyone but you with this the request"
6. Mobilization of efforts or pedagogical suggestion	Prompts to cooperation to perform specific actions.	"We cannot wait to start work", "I want so much to see the results of the work."
7. High-grading of intermediate results, or parts of activity	Helps to experience success not of the result as a whole, but of some of its stages.	"You've made a fine explanation", "Most of all I liked in your work...", "The highest praise deserves this piece of work".

The results of studies conducted in educational communities where technologies for creating situations of success are actively used, indicate that success in one or another form of activity is an active forming basis. The experience of joy, satisfaction, recognition is smoothing the affective reactions and the consequences of conflict situations. State of success is a subjective state of emotional satisfaction of a person in the process and as a result of self-realization, as well as his social status and role in the team. It creates a positive relationship of cooperation with shared goals of successful self-realization and self-affirmation.

Thus, success is a social quality, which is why it is perceived by a person in the process of acquiring social experience and is achieved through efforts and diligence. Achieving success in any activity always promotes individual self-assertion, appearance of faith in oneself and one's capabilities, effective interaction with society. The feeling of experienced success contributes to the development of self-confidence, increases self-esteem, and develops a sense of self-worth. In this case, the situation of success is a kind of "trigger" for further personal development.

M. Moltz, the world famous expert in the field of plastic surgical-energy, says that each of us has a "life instinct", a kind of program, which was originally laid for caring about our health, happiness – all the things that make our lives better. Instinct is tirelessly working for us using for its goals a creative mechanism or, more precisely, the mechanism of success, which is an integral part of every human body. In his view, the subconscious mind is a kind of a programmed for some specific purpose "servo-mechanism", which is used and operated by consciousness [135].

In technology a servomechanism is an appliance of automatic direction on a target using the information received via the feedback and that stored in electronic memory, which if necessary adjusts the direction of motion. Like every mechanism, creative physical mechanism should have a clear goal and a problem that it should work on. The goals that we set, are the mental images created by our imagination. The main objective is the image of the self that defines the boundary of a particular purpose, that is, outlines the scope of the possible. Using estimates and interpretations, we describe a problem that is necessary to work on.

The founder of cybernetics, Dr. Norbert Wiener, who during the Second World War, was one of the first to work on the creation of self-directing mechanisms, believed that something very similar is happening in the nervous system of a person engaged in purposeful activities. When we choose a target and proceed to action for its implementation, an automatic mechanism switches on. Similarly, the mechanism of success works. We can say that our automatic mechanism knows how to succeed in this situation. It "remembers" its successes,

failures, and repeats successful actions without thinking, by way of habit. Imagine a situation: the room is dark and we cannot see an object the table, but we know that it's there. Similarly, it is necessary to be aware of our success. And then the failure in the solution to the problem will not be a failure, not a proof of our insolvency, but only a phase of the restructuring of our psyche and its focus on achieving success.

It is well established that some parts of the human brain fix all that an individual has ever experienced, observed or learned. When we come to a creative work, we do it, imagining a purpose, a final result, a concrete action that emerges quite vaguely at first, but it will certainly be recognized, when it appears in our field of vision. If we truly want to achieve the desired and intensely reflect on the various aspects of the problem, our creative physical mechanism comes into action and with the help of a number of subtle efforts solves the problem. When the solution penetrates conscious mind quite unexpectedly, at the time of reflection on something else, we immediately recognize that this is exactly what we've been looking for. And the great chemist Dmitry Mendeleev in a dream saw his entire periodic table of elements on the creation of which he had unsuccessfully been working.

All this leads to the conclusion that instinct of success is laid in us by nature, we have an unlimited supply of intelligence, and the brain finds the desired answer itself. Consequently, we have all the prerequisites for the formation of a new self-image. The following recommendations can help with this [135]:

1. The built-in mechanism for success must have a goal or "target". It should be made as already existing really or potentially. The mechanism of success functions in one of two ways: it either leads us to the goal, the location of which is known, or defines the purpose, which exists somewhere.

2. Our "autopilot" is oriented to the goal, and it should provide the necessary means to achieve it. One has to think constantly about the final result, and the means, as it often happens, will appear.

3. Do not be afraid of mistakes and temporary setbacks. All "servomechanisms" reach the goal using a negative feedback, moving forward on track and constantly adjusting the direction of motion, gradually reducing the amount of deviation from the true real movement to the direction of the target.

4. "Education" is accomplished through trial and error, when our brain corrects errors automatically so long until it produces the correct movement, rhythm and quality of performance. After that, further education and sustainable success is ensured by the fact that past mistakes are forgotten and memory records only successful actions which are "copied" in future.

5. We must learn to trust our own creative mechanism, instead of loading it by excessive concern or anxiety about the reliability of its operation, attempts

to "fit" or "accelerate" it by too big conscious effort. Such trust is essential, because our creative mechanism operates at a subconscious level, and we cannot know what is going on in the depths of the brain.

Thus, the guiding principle of pedagogy of success is the humanistic orientation of the educational process. This principle presumes the creation of conditions for student-centered learning, directed on disclosure and development of the ability of the learner, his positive self-realization.

The second principle of pedagogy of success, the principle of successfulness, which is a system of mental inseparable components included into the structure of learning and cognitive activity. Success allows the learner to feel a sense of satisfaction from the performed work, increases confidence in himself and self-esteem, creates a sense of optimism.

The third principle of pedagogy of success, the principle of co-operation of teacher and student, is a necessary condition for self-knowledge of the learners, disclosure and development of their potential. The greater consistency in the pedagogical of interaction between teacher and learner, the more effective organization of the educational process is.

The fourth principle is the use of educational technologies and methods that contribute to the development of personality of the students and their self-improvement.

The fifth principle is a basic knowledge of psychology, both by students and teachers, promoting the formation of students' identity, of all aspects of their inner world.

The implementation of such training involves the use of knowledge of psychology by teachers, understanding of the role of psychology in the process of education. Now, as experience shows, many teachers of special (technical, economic, etc.) disciplines, posted on the Chair after graduation and not having teaching education feel acute deficit of knowledge of the basics of psychology. In connection with this it is necessary to improve this area. All aforementioned is extremely relevant for higher education, where the professional identity of students is not only formed, but also manifested.

### **Questions for self-control and verification**

1. Who laid the foundations of domestic pedagogy of success?
2. What are the most successful concepts of success?
3. Give the definition of "success".
4. What is the role of a personal-oriented approach in teaching students?
5. What role does the self-evaluation play in success of a person?
6. Explain the interaction of psychological and educational success and self-evaluation.

7. How to solve the problem of lack of success of students?
8. What is the role of the situations of success in the learning process?
9. Who is the author of the concept of "the situation of success"?
10. What is the role of the cooperation of teachers and students in the learning process?
11. How does success work according to Molts?
12. What are the basic principles of pedagogy of success?

### **1.3. Self-awareness as a basis for development of the student's personality**

#### ***1.3.1. Professional self-awareness: its role and structure***

The inner world of man, his consciousness and self-consciousness is one of central problems of philosophy, psychology and pedagogy. Its importance is due to the fact that the doctrine of the inner world of a man is the methodological basis for solving of not only many important theoretical issues, but also practical problems in connection with the formation of his position in life. Self-awareness serves for understanding oneself, organization of human life, his relations with the world and other people.

It is known that the man became a human when he first formed his understanding of *I*. This process has been associated with the development of self-consciousness, which is a person's ability to perfectly reflect the environment. Consciousness actively and selectively captures in images this or that circle of things, processes, and phenomena. Originally directed outward, it enables to know the outside world, to influence it, and then transform it. For this, consciousness must develop such features as programming activities, development of solutions and their implementation, taking into account the external environment, process control and correction of the activity in case when its actual results are quite different from desired ones.

In the course of interaction with the environment and other people a human was bound to realize himself as an object actually existing across time and space. This is due to the duality of consciousness: while remaining mostly directed outward, at one or another object, it gradually began to highlight the inner essence of itself as a subject. Thus there was formed the second component of consciousness – self-awareness, later called *I*. A well-known Russian physiologist Ivan Sechenov believed that consciousness arose in two forms: objective consciousness and self-awareness. The result of the consciousness is the knowledge of the world and self-knowledge of the man about himself and his abilities.



Self-awareness is an important link in the development of personality. It is defined as a conscious cognitive perception and evaluation by a person his individual self, thoughts and opinions about himself. Self-consciousness is formed in the course of its day-to-day communication with other people and society, through the knowledge of which it comes to the knowledge and understanding of itself. It comes to its realizing its identity, a certain stability, integrity in a variety of situations. Such basic functions of consciousness are conscious use of knowledge about the mechanisms and patterns of mental activity during the formation of the inner world of a man, the development and perfection of the individual in accordance with social and moral demands of society.

Scientists who have studied the problem of self-awareness are: B. Ananiev, A. Bodalev, I. Bech, R. Burns, L. Vygotsky, I. Kon, A. Leontiev, A. Petrovsky, S. Rubinstein, V. Slastenin, A. Spirkin, V. Stolin, et al. In psychology, self-consciousness is usually understood as the feelings of integrity and personality traits. This is self-image and attitude to oneself. It is inextricably linked to the desire to change, with self-improvement. In this regard, I. Kon says that the set of mental processes by which the individual realizes himself as the subject of activities is called self-consciousness, and its idea of self forms the image of *I* [93].

The level of self-awareness or the degree of complexity, integration and sustainability of the image of *I* is closely connected with the development of intelligence. This process is clearly seen with the growth and development of the child for whom the only perceived reality is the outside world. Early adolescence is characterized by sudden discovery of the inner world of his own, resulting in the discovery that physical, material world is only one of the possibilities of subjective experience, the center of which is the young man himself. The image of *I* appears as a chain of continuous contrasting oneself to all other non-*I*'s.

Thus, consciousness, knowing the world, makes human activity more flexible, expedient, and productive, while self-awareness, directed into a physical and mental nature of man, tends to increase the efficiency and reliability of a person, acting as a system as a person acting in the objective world. That is why the perfection of man as a self-organizing and self-programming system is possible only under one condition – the indispensable development of self-awareness. This is what determines the interest in this issue of the pedagogical science and its connection with psychology.

In the process of training an important task is to develop students' professional consciousness. For practical implementation of this task, theoretical understanding is important, that is, it is necessary to figure out what is the pedagogical sense of the term, to reveal its motivation value, to work out the

principles of formation. The concept of "*vocational consciousness*" often includes awareness by an individual of his physiology, mental, intellectual, and physical development, understanding the requirements of various professions to a person, adequate compliance with these requirements and filling future careers by personal meaning, which makes it relevant and necessary to succeed in life.

Professional identity of a student must be viewed in two ways: as an objective, the dynamic state of the individual, which varies with his development, and as one of the most important goals of vocational training, which should make it possible for every individual to express himself in activities, to experience the feeling of success.

The value of professional consciousness of students is very high under the conditions of modern life, where every man is a master of his fate and his own personal qualities determine the level and quality of life. In these circumstances we need to educate a person possessing not only a competitive labor resource, but also the prospects for labor potential. Attitude toward their chosen profession, the ability to see it from aside and oneself as a part of it plays a great role in the development of a student as a professional in any field. Only when the selected form of activity becomes a part of a person's life, not just a way of satisfying material wants, can we talk about a formed professional identity.

Years at school cannot and should not be treated as a preparation for the entry into higher education or as a way of mastering the knowledge needed for the future. This is the time of formation of a person's resilience, self-reliance, personal responsibility and awareness of life as the highest, incomparable value. For this reason, self-awareness, which is based on optimism as the fundamental basis of the spiritual life and development of the individual is the single criterion of his willingness to achieve success in life.

Preparing for the choice of profession is an integral part of the process of personal development, which is an important social problem facing every young person entering independent life. Error in the choice of profession is not only the failure of a person – it has serious implications for society. The cause of an inadequate choice of profession can be both external (social) factors associated with the inability to do it in accordance with their interests, and inner (psychological) factors due to lack of awareness of their professional aptitudes or inadequate representation of the content of future performance.

*Professional choice is a special procedure for the study of a probable estimation of a person's ability to master a skill, to achieve the required level of mastery and successful execution of professional duties in the standard and specifically established circumstances.* In this common to distinguish its four main elements: medical, physiological, pedagogical, and psychological.

To assist pupils in this problem, professional orientation and awareness of themselves as individuals is needed while still in school. *Professional orientation*

*is the system of means of awareness among young people of different professions, which contributes to the choice of specialty corresponding to the person's individual characteristics and needs of society.* For successful professional orientation it is necessary to have at one's disposal technological characteristics of the main production processes: their socio-economic, medical and physiological, sanitary, psycho-physiological characteristics, which set forth the requirements of profession to the individual peculiarities of people. This includes an assessment of working conditions, a list of characteristics and contraindications. All this promotes better choice of future profession while studying at school.

Currently, there is widespread development of professiongrams (job descriptions), which reveals the presence of certain personal qualities and determines the state of a person's health. *Professional psycho diagnostics is the use of well-grounded and experimentally validated set of techniques, of necessary technical means, standardized procedures for identifying and interpreting obtained information, forecasting, evaluation criteria of success in future professional activities and recommendations on psychological correction.* Such information encourages a person to self-knowledge, professional self-determination, which makes the motives for his choice of future activities more persistent, and the process of education and vocational-and-personal formation more successful.

In the process of training and education each student in a relatively small period of his life should get an idea of the chosen specialty, the necessary basic knowledge and skills, find his place in society, profession. Wrong choice of sphere of professional activity leads to frustration, it atrophies possible development of creative abilities of the individual. As a reason of this can be mentioned, above all, lack of determination and validity of professional preferences. A research shows that many students chose their profession for reasons of prestige, its profitability, and not because they were predisposed to their chosen specialty.

The starting point of the research, the basic ideas hared by modern educators and psychologists, is the recognition of the forming role of human activity. This approach to the formation of a professional self-consciousness means that a major role is played by life experience that is associated with the activity, and therefore the process of vocational education in high school should be accompanied by active enough practical activities.

Therefore, one of the most important problems of education is the formation of students' interest in their future profession – the basis of professional self-awareness and its success. V. Myasishev, considering the interests closely related to the needs of the individual, identified the specifics of interests, which express cognitive attitude towards a speciality, while needs

show the tendency of real mastering it. *The vocational interest of a student is understood as the conscious choice of profession, which he wants to deal with.* It presupposes the existence of cognitive interest and is detected in the course of professional counseling. Professional interests are often very persistent and always favorably affect the state of satisfaction in the learning process and its success.

The right choice of profession is often associated with the presence and the formation of the most important personal qualities necessary for success, and also stimulates demand for their identification, development and improvement. The education system should be set a target of a person's identity formation on the basis of existing capacity, professional instincts and knowledge of the individual laws of its internal development, search, discovery and creation of conditions for development of personal qualities, including professionally significant ones.

Thus, the identification of interests and personal predisposition to future professional activity is an important predictor of satisfaction with it in the course of training and gaining success in this profession in future. Only when the selected activity becomes part of human life, his personal sense, can we talk about the forming of professional identity. The correct choice of specialty largely provides the formation and manifestation of personality traits necessary for success.

The task of the teacher is to form the inner world of the student and, therefore, affect the formation of his professional identity. It is extremely important to develop education into the process of self-discovery and self-development, due to a clear understanding of oneself and one's life program. For this we need to know the structure of self-consciousness, its mechanisms and methods of formation. There are different approaches to the study of these problems, and one should pay attention to those that reveal the contents of consciousness to a greater extent and may be used both in teaching practice and in professional activities.

In this connection the structure of self-awareness is of great interest, and includes the following three closely interrelated components: self-knowledge, self-control, and self-improvement [47]. Let us examine them in more detail:

**Self-knowledge** is one of the toughest and most subjectively important of tasks. This means a person's aiming at knowledge of the physical (bodily), spiritual possibilities and qualities, his place among other people. There are three aspects of it. Firstly, an analysis of the results of his activities, his behavior, communication and relationships with other people on the basis of the existing rules. Secondly, it's awareness of other people's attitude. And thirdly, self-knowledge is carried out in the process of self-introspection of one's states, feelings, thoughts, and analysis of the motives of actions.

Self-knowledge is composed of self-observation and self-evaluation. *Self-observance* also has two sides. The first is directed outward, and the person uses it, as if he were watching his practical activity from aside, correlating the results with his aims and attitudes, as well as public interests and goals. The second is directed inward, at one's *I*. Self-observation is a means of man's knowledge of his own psyche, its specific features, aiming at solving the challenges facing the person.

In psychology this is called reflection. *Reflection is a person's ability to express his own states, emotions, relationships, which helps not only to understand, but if necessary, rearrange them, that is, to manage his personal values. Reflexivity means to experience, to pass information through one's internal world, to appreciate.*

The leading role in the study of problems is given to *self-evaluation*. It is characterized as the core of this process, the rate of individual levels of a person's development, his personal aspect organically included in the process of self-discovery. With self-evaluation are associated estimating functions of self-cognition, comprising emotionally-valuable attitude of an individual to himself, specifics of his understanding himself. It allows a person to correctly assess his mental and physical condition, his relations with the external world and other people.

Self-evaluation is subjective and cannot serve as a sufficient basis for a self-governing behavior. It is adequate (real, objective), or inadequate, which, in turn, may be too low or too high and must be necessarily cross-checked by comparing one's behavior and its results with the objective circumstances and with the results of other people and society. Ananiev argued that self-evaluation is the most complex and multi-faceted component of self-awareness. This process mediated by self-knowledge is deployed in time associated with the motion of single situational images through the integration of similar images in a holistic perception and reflection of the evaluation of other people who are involved in the development of the personality.

Spirkin notes that self-evaluation is a necessary condition for realization of the following two important stages of self-directed behavior: self-monitoring and self-improvement.

**Self-control** is a self-governed behavior. The degree of self-control, control of oneself by each person varies in different age periods of life. It varies from person to person because individual ability to self-knowledge and self-evaluation is extremely different. Formation of a capacity for self-control requires the presence of *voluntary basis* early in the behavioral acts of a person. However, the constant strain of will and intellect or conscious mind forms does not occur, because many elementary forms of behavior and judgment are

imparted to a person in the process of education and turn into the so-called psychic skills or stereotypes performed unconsciously, automatically. In this way is formed a habitual way of thinking, a way of mental responses and the style of behavior.

**Self-improvement** of a person is to a large degree connected with improving the psyche. There are three main types of the psyche formation: spontaneous, purposeful, and self-formation. An important role in the development of any individual is played by a spontaneous formation of the psyche that occurs as a result of spontaneous, unplanned impacts. Street, classmates, neighbors, books, media – all this affects the formation of the psyche.

*Intended* effect on the psyche is exercised by means of educational and training work. It is the interaction between subject, object and the process of knowledge. This process is effective in the case when it leads the cognizant to work on himself autonomously and when he is engaged in a *self-forming and self-development* of his psyche. And here the role of the school and the university is difficult to overestimate.

It is known that in the human psyche there are many hereditary (transmitted through genes) and innate (determined by the conditions in uterus development) traits, which exist in the form of latent psychophysical ability, which can be identified and implemented only under the influence of environment and human activities and also in the process of *self-programming and self-improvement*. Pavlov possessed indisputable scientific facts from the field of higher nervous activity to come to the following conclusions: "The man is, of course a system to a highest degree self-regulating, supporting itself, restoring, directing, and even improving itself" [149, p. 244, 245].

Thus, the overall structure of consciousness can be schematically represented as follows, as shown in Figure 1.1. It reflects the basic constituents of the phenomenon of self-consciousness and their relationships.

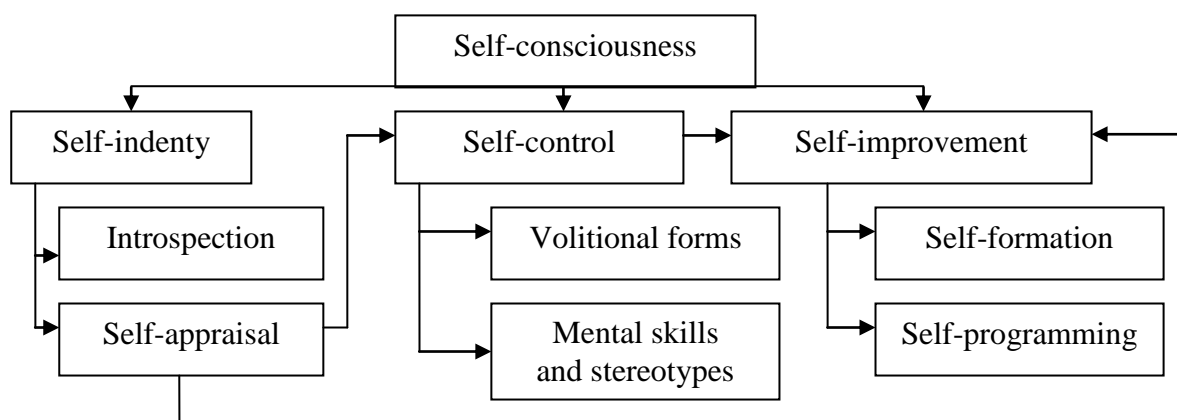


Figure 1.1 – Structure of the human self-consciousness

### ***1.3.2. The methods and techniques of personality self-programming on success***

The process of human self-improvement involves a process of self-programming and self-formation. The starting point is his desire to achieve the set goals of his actions or life prospects. Often, the formation of a clear and stable objective turns out to be a sufficient condition for effective programming of human activity for life (forever) all other aspects of his life are subject to the interests of achieving it.

Self-programming sometimes occurs in early childhood under the influence of some spectacular event or image, leaving its mark in the memory of the child. It is often carried out by recognizing – one of the most common neural mechanisms of behavior programming. The feature of this mechanism is that a certain shaped stimulus being perceived only once remains in the memory for a very long time, sometimes for life, actively influencing the behavior of the individual. Thus, imprinting may be considered a form of involuntary programming.

It should be emphasized that the active principle of the mechanism of imprinting is always an all-sensory image of the outside world (another person, a certain life situation), or the image of one's own internal state. For this mechanism to work, two additional conditions are required: a certain (phase) state of brain cells and the expression of emotional situation that causes involuntary attraction of attention of the person for quite a long period of time. Under these conditions, the sensual image is firmly fixed in the long-term memory and obtains a programming function.

This can occur under normal conditions at a high enough mental shape. This requires a person to concentrate periodically, actively, and purposefully on the appropriate image, trying to perceive it as an objective reality. This is precisely the essence of the independent programming function of subjective images, of the role of representations.

*Concepts* in psychology are the reflection process in the central nervous system of objects and phenomena of the external world at the moment when they are not directly affect the senses. Representations are an effective lever of influence focused on the state of the physiological systems of the body, on the mental attitude, and thus on the nature and characteristics of human behavior in its mutual relations with other people and with nature.

The process of the mind's self-programming helps to solve a wide variety of tasks: to acquire necessary knowledge, develop new skills and habits that increase the level of self-awareness and its regulatory influence on human behavior. The efficiency of this process is significantly improved if the process of changing perceptions of oneself is speeded up, so that it is slightly faster than the real change.

A person's vision of himself is made up on the basis of assessment of his life experience, social status and attitudes of others, understanding of his level of development and education, the knowledge of his character, appearance, health, and other factors. If necessary, many of these qualities may be subjected to targeted correction, not only by physical, but also by mental methods of influence, based on the active role of representations. Due to the regulatory role of consciousness one can largely ignore the real impacts of the outside world and by certain representations to recreate the action of former irritants or by constructing new ideas based on old ones, form them deliberately.

One of the conditions of mind's self-programming, associated with a person's behavior, is the formation of habits. Person's habits play an important role in his life, in achieving its goals. As the ancient wisdom says, "If you sow an act, you'll reap a habit, if you sow a habit, you'll reap a character, if you sow a character, you'll reap a destiny." A person usually needs to dispose of any unnecessary or even harmful habits and make new ones, essential from the point of view of achieving the goals set by himself. Of particular difficulty are habits related to household intoxication (smoking, alcohol, drugs, etc.). In this regard, it is useful to recall the words of Seneca that one can only manage kindness, but not mental illnesses – they are easier to eliminate than to curb.

Another essential programming mechanism is human speech. In a state of hypnosis, autogenic training and in the state of wakefulness it plays an important regulatory and programming function. Long ago I. Pavlov noted that the second signal system is the supreme regulator of human behavior.

Among other forms of verbal self-programming of the mind *self-improvement and self-promotion* can be mentioned. Although this form of self-formation is more peculiar to children, it is of some importance for students, since it contributes to the consolidation and strengthening in the minds of their positive attitude to their own behavior or activity. This form of verbal self-programming is widely used by athletes.

The role of the opposite forms of self-formation is played by *self-deprecation* and *self-punishment*. A highly effective means of self-regulation, they are a necessary element of the internal work of the students on development of high standards to their own programs of activities. However, it should be remembered that the high demands on oneself should not be combined with constant frustration. This may in time lead to mental discomfort, to disbelief in one's abilities, which often leads to the formation of an inferiority complex.

Among other forms of verbal self-regulation may also be called *self-punishment, self-restraint, self-encouraging*. The programming role of such activators, even if they are used as internal speech, is high. This is confirmed by the results of many psychological studies, including, for example, the field of sport psychology.



Many authors argue that mental phenomena associated with the day-to-day organization and programming of mental processes and states of a person, are nothing more than a special form of *self-hypnosis*. At the same time, these phenomena are the mechanisms of self-formation. One can draw an analogy with physical training. All people in normal conditions carry out a greater or lesser amount of physical movements. However, by using a focused, systematic development of certain muscle groups and relevant motor functions a person can achieve significant results.

At present, theoretical views on the nature of hypnosis are significantly and steadily released from the point of view of some scholars, who saw it as certain ill effects or viewed it as an impact weakening the volitional sphere of a person. *Hypnosis and self-hypnosis* as methods of regulation of human condition intensify many mental processes and produce more pronounced and purposeful effect. So many writers, realizing the benefits of hypnosis techniques and its physiological principles develop on its basis special techniques of psychic self-regulation, which are widely used in self-programming. These guidelines should be used in the pedagogical process.

Indian writer M. Powers in the book "Self-Hypnosis" analyzes in detail the positive aspects of this kind of self-formation. He believes that by activating processes of imagination and ideas using this method one can create a strong system of relations with the surrounding reality (one's own mental attitude). Similarly, one can generate one's private internal aspirations, needs and values.

Preparation for using this method assumes self-clear formulation of meaningful goals of this work. This is followed by a kind of internal conversation with oneself. It must be held in a completely quiet environment easily, slowly and thoroughly. It is best to conduct it in a darkened room in the supine position, completely relaxing the muscles and possibly shutting oneself out from everyday life. Representation of one's own image, endowed with the desired qualities, should be bright enough, expressive, and dynamic. Self-hypnosis involves the following stages of the inner workings:

- 1) making the decision to do such work by articulating its goals and objectives;

- 2) pre-hypnosis conversation with oneself, in which a logical justification of the need for extracting this work is expressed, the results that can be achieved after its completion, and the benefits to be derived as a result are discussed;

- 3) fixing with the mental eye of one's own image, endowed with the desired qualities (this step of programming is carried out against the background of self-hypnosis);

- 4) consolidation of new properties acquired through hypnosis with real activities in the post-hypnotic period.

Great help in a personality self-programming can make the use of a variety of psycho-technologies offered through neuron-linguistic programming. They are based on a number of basic principles that describe the relationship between man and reality and play an important role in all spheres of human activity. In Figure 1.2. there are mechanisms of self-programming:

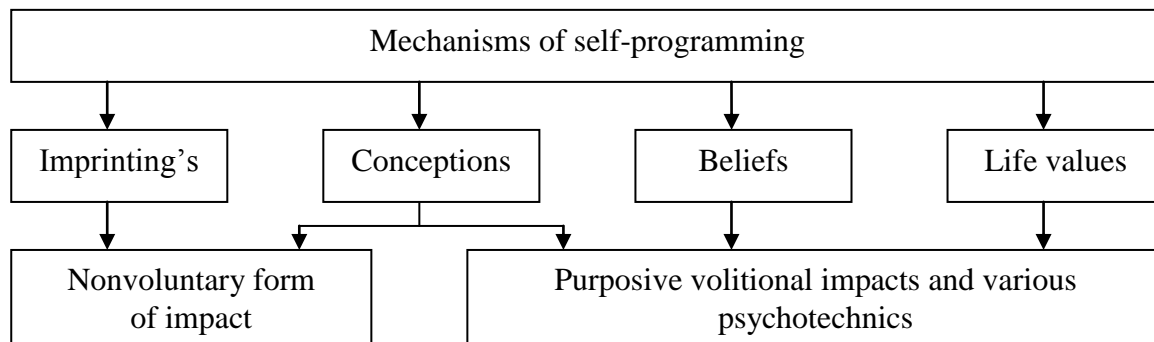


Figure. 1.2 – Mechanisms of personality self-programming

Our outlook is based on our ideas about the world, beliefs and values. *Value can be defined as an objective significance of events, ideas, things, due to the needs and interests of the subject.* Values initially are formed by mankind and being public property, they have a significant impact on the formation of every individual. Life values have a number of social functions:

- ensure harmonization of the inner world of an individual, the systematization of his knowledge, norms, stereotypes, and so on;
- develop a series of social standards and involve an individual in the system of norms and values of social environment;
- promote self-assertion of personality, the realization of his talents, social expectations.

Gaining value orientations occurs throughout human life. At first, a person unconsciously accepts the model of the world, which he is offered, and later, influenced by circumstances, corrects it. It starts with a meaningful reevaluation of the phenomena of life in the search for meaning of life, as well as the systematizing of values in life, balance of priorities. The information that an individual uses is taken from observation and reflection, from the experience of previous generations, and the intrinsic life experience, from communication.

During the student life a person especially sharply raises a number of questions concerning knowledge of the laws of the world, his place in it, the meaning of life. A person without his internal understanding does not feel a sense of integrity and is not able to control himself. It is at this time when a mature, harmonious personality appears. This period of life is the most conducive

to learning and training. The overwhelming importance in the cognitive activity is beginning to take the formation of the picture of the world, establishing links between different areas of the studied reality, the need for knowledge and self-knowledge, self-development and self-improvement. At this time in the life of a student the following changes take place:

- rethinking of social values, updating personal experience, understanding problem situations, development of new principles of conduct and implementation of the new-found meaning;
- transfer of specific issues, knowledge, and skills from the form of potentially significant into the form of actually significant that helps to identify and develop personal potential of students;
- transformation of objectively significant values into subjectively significant, which generate beliefs, motivation, attitude to learning and cognitive and professional activities.

An important role is played by a personalized meaning of a person. *Personalized meaning is subjectively perceived by the individual significance of any items.* Moreover, the measure of awareness of the true meaning can be different. It is determined by the detection of the object relations with the motives, needs and values of the individual. The generation of personal meaning occurs on the basis of goal-setting in relation to the motive. It is linked to the desire for self-development and self-improvement. This is a prolonged and multi-faceted process that includes a conscious search for identity, search of one's priorities in life, meaningful sense of professional activities.

The complexity and heterogeneity of the nature of personal meanings, duality sources of their generating, formation and development, the diversity of the functions they perform suggest their functioning as a complex multi-level system. Most researchers of the problem of meaning highlight the fact that a person is characterized by presence of not one but a number of different meanings. This implies that personal meanings are the link between the various subsystems of the individual. They represent a system organized in a certain hierarchical sequence, reflecting the processes of development and personality functioning at different stages of human life.

### ***1.3.3. The formation of encouraging beliefs and self-efficiency of personality***

It seems that every experience gained in life remains forever somewhere in the depths of our consciousness. With it a new interpretation of information coming into our brain takes place, and our beliefs are formed. However, not all our experience is direct and immediate. We read books, we learn, we find out something about the world around us, explore other people. All of this knowledge comes into our neural system. This secondary experience

becomes the primary one and our own when it is recorded in the brain. The very process of thinking changes the system of neural connections and can form and change beliefs, imposing on them mediated experience.

The term *belief* is understood as closely related views of the individual in relation to

- Cause-and-effect relationship;
- Value;
- The boundaries of the world, as well as those of behavior, abilities, and identification [55, c. 112].

The most important factor in forming our opinion is subjective perception of the diversity of environments in which we find ourselves as a children, it is this environment that becomes the source of our beliefs. If we imagine ourselves being someone, we come to the confidence in our ability to be like that person. This was confirmed by thousands of people who have achieved success in life. The behavior has an impact on the beliefs, firstly, because of the interpretation that we give to a particular act, and secondly, through the gradual establishment and strengthening of the internal image.

Many writers, athletes and business leaders paid attention to how much their internal image, the image of themselves in their own consciousness influenced everything that they were trying to do. It is even considered that this is the only truly important factor in any human achievement. A famous American plastic surgeon Dr. M. Moltz established: many patients expect that cosmetic surgery and change of appearance shall be immediately followed by severe personality changes. However, in most cases, even a radical plastic surgery has no effect on the real problems of patients, their internal image. And only by achieving change of their attitudes, M. Moltz was able to demonstrate the outstanding results of his work.

Our beliefs are largely dependent on the results that we have received in the past from our real achievements. If we have repeatedly and consistently achieved success, it is an essential support for our confidence. But if our results were very diverse – alternated wins and losses, as is the case in most people's lives – we interpret our behavior in any desired manner. A pessimistic person can analyze even a successful situation and evaluate his behavior in it negatively. On the contrary, a person with a positive attitude even with less progress finds a lot of excuses and is sure that next time he will be lucky.

Specialists of Neuron Linguistic Programming (NLP) divide all beliefs into encouraging, giving strength and confidence, and restricting ones which can also make a huge impact on mental and physical health. Restricting beliefs are characterized by such statements:

1. Hopelessness – the belief that the desired goal is unattainable regardless of our ability.

2. Helplessness – the belief that the purpose can be reached, but we are not able to reach it.

3. Worthlessness – the belief that we do not achieve the desired goals because of personal characteristics or behavior [55, p. 117].

In order to succeed, one must change these restricting beliefs, turning them into hope for the future, self-reliance and responsibility, as well as a sense of the necessity and significance. Obviously, the most deeply held beliefs concerning our identification, restricting beliefs act as "thoughts-viruses" that have the same destructive power as that of the computer or biological viruses. Such idea can turn into a "self-fulfilling prophecy" and nullify any attempts at self-development or self-improvement. Thoughts-viruses contain the unspoken assumptions and assumptions complicating their identification and abatement. Successful overcoming of deadlocks requires identification of the underlying restricting beliefs.

It is found that the following procedures can contribute to the renewal and change of restricting beliefs:

- awareness of the hidden positive intentions;
- the definition of any unspoken or unconscious assumptions or assumptions underlying beliefs;
- expansion of perceiving, relating to the conviction of cause-and-effect relations or "integrated equivalents";
- information on "how to do it", and creation of alternative variants to exercise the positive intention or purpose;
- clarification or updating of important relationships that form our sense of mission and importance, and getting positive reinforcement at the level of identification [55, p. 120].

The power of expectation largely determines the choice of a person's behavior and has a huge impact on his current view of the world. Even the slightest change at baseline beliefs leads to changes in the behavior and results of activities. Many top athletes consider early self-confidence and faith in their own strength as the first step to success, which is often based on the approval of a teacher or a parent or formed under the influence of role models. The so-called natural abilities or talents cannot be explained solely in terms of genetics, education and training, NLP experts say. This idea is crucial to the learning process at all levels, especially for higher education, for the process of self-development and self-improvement of students.

The power of belief in the learning process was also confirmed by the experiment carried in children with average (as tested), intelligence. They were randomly allocated into two equal subgroups. One group had a teacher, to whom it was said that this were gifted students, the teacher of the other group was informed that those children were lagging behind in development. A year later, both groups were tested again and it was found that those who were in a "gifted"

group scored more points, compared to those who studied with the label "retarded."

Only after a special analysis it is clear that our actions match the matrix of beliefs and are their manifestations. They can influence both positively and negatively. Managing the process of a belief formation, one can make a real difference in a person's life. The ability to change the scope of a self-image is nothing more than a manifestation of the law of prerequisite variety with regard to belief systems. Under this law, if we want to achieve a certain goal, we must increase the number of ways to achieve it and make some variety in methods.

Thus, the familiar feelings can easily be transformed into some kind of deep-seated convictions on various aspects of life that practically almost constantly affect our behavior. Therefore a change in thinking strategies can dramatically affect all our activities. Our self-image and self-esteem has a direct and decisive influence on the behavior of all the components, they are dependent on the success of all our endeavors. We can change them in such a way that they are more in line with our intentions.

To do this, we need to assess which beliefs are inspiring, challenging to action. Then we should determine what beliefs are paralyzing, able to halt the human in the way of disclosure of their potential. Finally, we must determine whether the specific beliefs acceptable to us. In order to establish the correctness of the chosen direction, you need to make along the following lines:

- clearly define your own beliefs;
- think about whether they contribute to the achievement of our chosen target;
- try to understand what the rules of conduct established by us were based on the given beliefs;
- if necessary, replace some beliefs, by the others which may be more relevant for your goals.

Early formation of correct positive belief system creates and supports confidence, interest, pleasure associated with vigorous activity, and as a result generates and nurtures the skills and abilities that would later appear to us to be quite natural and granted by nature. Creating a strong positive internal image in relation to a specific area, and then training and continuous development of this way of thinking will achieve success. Such technologies should be used during training in high school.

In NLP, there are a number of tools and strategies that can help to develop positive expectations and give up negative ones. So to build one and abandon the other is possible through the use of submodalities. Fulfilling the role of a code, they give meaning to images. In other words, submodality determines not only what we see, but also how to interpret what we saw, what we feel about it. When we think of neural connections in the brain very real changes occur. We can consciously use this feature of thinking to make changes in our lives. With

the establishment of appropriate thought-images we can change our thoughts, ideas and beliefs. This technique, increasing the flexibility and variety of choices, will contribute to the disclosure of reserves available to the students to involve their subconscious, to intensify the process of thinking.

The first step to changing beliefs about you is to identify aspects of your self, the sources of internal image. G. Alder recommends a list of characteristics by which we can describe a person. In this case, it is not about how other people see you, and how you evaluate yourself. On the basis of each of the words in this list a reasonable statement can be made that expresses one or more specific beliefs. They have a powerful impact on our behavior and the results obtained. Then check every belief in the process of thinking, to be sure which of these are positive and which are negative, and how they act in specific situations.

For a start it is enough to begin to understand the structure of beliefs and differences between them, which is the key to the selection of a particular type of behavior. Once we learn to modify our feelings, we will be able to use the inspirational power of self-tuning to create the desired belief and will easily change some of them. Thus, we can determine for ourselves and successfully use mental strategy that will bring tangible results in terms of self-programming. To test its effectiveness you should ask yourself a few questions, namely:

1. Are your beliefs expressed positively?
2. Is this really your belief, and not someone else's who is trying to influence you?
3. Will this belief positively influence your future life and support you?
4. Is your belief dynamic or static?
5. What actions support this belief? [4]

The influence of beliefs on our lives is enormous. However, they almost never can be handled by means of ordinary logic or rational thought. Truism: "If you really believe that you are able to reach the goal, you will achieve it, if you think to the contrary no amount of effort will convince you in reverse." Our beliefs about ourselves and of what we are capable of, affect our performance. We all have beliefs, serving as additional resources, and beliefs that limit our possibilities.

It is possible to convert the later ones and immunize against thoughts-viruses by expanding and enriching our models of the world, as well as a clear sense of our identity and mission. If we become aware of these deep intentions and edit our own mental maps, including into them other, more effective ways of intentions, beliefs can be changed at the cost of a minimum of effort and suffering. Restricting beliefs can be converted or edited by the definition of the positive intentions and assumptions, as well as the creation of alternatives and new answers to the questions with the word "how." If a person does not know how to change his own behavior, it is easy to create a belief that it cannot be changed.

Beliefs, both empowering and limiting ones, are closely related with our expectations. Expectation means "anticipation" of an event or result, or a high degree of confidence of their achievement. Expectations make various impacts on our behavior, depend on what they are directed at. Freud wrote on this subject, that there are certain ideas, endowed with property of expectations. These ideas are of two kinds: the idea that I am doing some action (the so-called intent), and the idea that something is happening to me – the actual expectation. The effect accompanying them depends on two factors: firstly, the degree of significance of the result for me and, secondly, the degree of uncertainties inherent in the expectation of the result.

Human beliefs and expectations related to the results and personal abilities may play an important role in shaping the ability to achieve the desired state. Singled out by Freud "intentions" and "expectations" refer to what that in modern cognitive psychology is called expectations of "self-efficacy" and waiting for the results. Expectations are a result of the assumption that a certain behavior will lead to certain results. Expectations of "self-efficacy" are connected with the certainty that a particular person is able to implement the actions required to achieve the desired result.

Beliefs and expectations often determine the amount of effort that will be spent in a given situation, and the time of their actions. Strong positive beliefs cause us to make a maximum effort and realize the hitherto dormant abilities. An example of this is the so-called "placebo effect". To achieve it a patient is given a "medicament", which contains not a single active therapeutic ingredient. If a person expects related improvements, the symptoms of his illness will soon really weaken. Some studies of the placebo effect have led to dramatic results. In similar cases, the expectations of a person lead to actualization of hitherto non-disclosed behavioral resources.

The result is correlated with the extent to which a person expects that the acquisition of skills or behaviors will give the desired results. The expectations of "self-efficacy" are associated with a degree of a person's confidence in his own strengths, or the ability to learn or to perform the actions necessary to achieve the result. Achieving the desired results through successful action in a difficult situation can strengthen a person's confidence in himself. The fact is that in normal circumstances a person does not reveal his full potential, even if he has the necessary skills. And only under conditions that require maximum commitment, one can find out what he can do. No wonder they say that the second wind comes when the first is exhausted.

Expectations of expected results of behavior are the primary source of motivation. Feelings and actions of people depend on the values and motives that are attributed to the expected results. Strong expectations of a positive result can cause a person to make every effort in the hope of achieving the desired state. Expected consequences that are perceived as negative, on the contrary,



lead to a decrease in activity or apathy. Sustainable anticipation of success or failure gives rise to the so-called "self-fulfilling prophecies."

Thus, expectations strongly influence our motivation, and the conclusions that we make on the basis of the experience gained. Power of expectation is a function of the strength of the representation of the anticipated outcome. From the point of view of NLP, the more a person is able to see, hear and feel the future consequences of his activities in his imagination, the stronger expectations will be. Consequently, they can be enhanced by expanding the range of internal images, sounds, words, and feelings associated with likely future action or consequence. Similarly, the expectations can be weakened by reducing the quality or intensity of internal representations associated with possible future consequences.

The basic approach of NLP to create or change the expectations assumes either to work directly with the internal sensory representations associated with specific expectations, or with the hidden beliefs that are the source of this expectation.

People tend to think that the process of changing beliefs is complicated and time-consuming, involving conflict and strife. However, each of us throughout life in a natural way creates or refuses as unnecessary convictions hundreds and even thousands beliefs. Perhaps the difficulty lies in the fact that when we try to consciously change our beliefs we suppress them, do not endorse, criticize, disrupting the natural cycle of change of opinion. If this cycle is adjusted according to the process of changing beliefs, it can be surprisingly easy.

One has only to reflect on the changes that have taken place at different stages of life, and he will find many examples of this cycle. Stages of change in the natural course of beliefs are an illustration of how our inner state has a significant impact on this process. The internal state of a person is connected with the psychological and emotional experience available to the person at the time. It largely determines the choice of his behavior and has a huge impact on the actual vision of the world.

For this we need to remember as vividly as possible and clearly those cases where we have successfully operated, implementing and affirming our belief, then we should examine our feelings. Performing actions in mind that we do well, we experience pleasure and strengthen self-confidence, and ultimately the inspiring belief becomes stronger and more efficient, allowing us to achieve more. To create an additional effect one can apply the method of working with the parameters of admissible variants of internal image, creating a more vivid multi-dimensional picture, which is a reflection of our strongest belief and of the most motivated action.

In preparation for the various phases of our life or career, we repeat this cycle, again and again, which includes:

1) the desire to believe that we are able to manage the new situation successfully and skillfully;

2) having entered into a new stage and received the necessary lessons to overcome it, we are ready to believe that we can achieve success;

3) demonstration of ability strengthens our belief that we are lucky, resourceful and do exactly what we need [55, 76].

The attitude to the world depends on our interpretation of the situation that NLP regards as "justification." Our every action is under a kind of excuse. Whatever we do, we need some explanation or justification of our actions, no matter whether we like them or not. Similarly, there are also justifications for sentiments, beliefs, attitudes and self-evaluation. In this regard, an important role in behavior management is played by a person's self-consciousness as well as his self-control and fostering of a sense of responsibility for his actions and deeds.

Thus, preparation for professional work presumes the formation and development of value-concept components of self-awareness. This is an important task of the training period in the making of the person as a professional. B. Ananiev paid attention to the "perestroika" at the student's age of the entire system of value orientations of the individual. Personal-professional development of students in higher education institutions directly depends on the meanings and values that they find in their professional activities.

Becoming aware of one's qualities, potential for development contributes to rich filling of training activities and to enrichment of semantic relationships. Through self-knowledge a student begins to navigate in the world, understanding his place in it. The presence and awareness of personal meaning, that is a meaningful component of a professional activities is an important condition for professional and personal development of the student.

Thus, the methodological basis for the formation of professional identity of students is a process of self-discovery and self-development, caused by an acute awareness of themselves, their place in the modern world and its life program. Ability for self-awareness and self-knowledge is the exclusive property of the human aware of himself as a subject of consciousness, communication and action, assuming a direct relation towards himself. The final product of the process of self-knowledge is a dynamical system of representations of a person about himself, associated with their assessment, called by the term "self-concept" (*I*-concept).

Self-concept is a set of all representations of a person about himself and includes beliefs, estimates and trends of behavior. Because of this, it can be regarded as peculiar to each individual set of facilities aimed at himself. It is an essential factor in the organization of the psyche and behavior of an individual, because it determines the interpretation of the experience, and is the source of the expectations of the individual. And self-programming is the initial stage of

self-improvement and its main method. Whatever the goal a person sets to himself, success in achieving it mainly depends on how well a constructed program is supported by personal values and beliefs, to what extent the influence of the environment is taken into account.

### **Questions for self-control and verification**

1. In what does duality of consciousness manifest itself?
2. What is self-consciousness and how is it formed?
3. What determines the level of self-awareness?
4. What is the structure of self-consciousness?
5. How can you describe the process of self-identity?
6. What is self-evaluation of a personality?
7. How is self-control carried out?
8. What distinguishes spontaneous formation from focused formation?
9. What is the essence of self-formation of the psyche?
10. What are the ways of self-programming of the psyche?
11. What role do sensory images and words in self-programming of psyche play?
12. What is the role of hypnosis and self-hypnosis in self-regulation of the psyche?
13. What is the role of values and beliefs in personal and professional development?
14. Describe encouraging and limiting beliefs and how to build self-efficacy beliefs.

## **1.4. Self-concept and its role in the formation the personality of the student**

### **1.4.1. *Self-concept and its structure***

The discovery of the so-called image of self was a significant event in the field of psychology and pedagogy. Consciously or not, each of us has a mental image or a portrait of oneself. Sometimes before our mind's eye it appears somewhat hazy, vague or even consciously perceived. But it is present within us in all the smallest details. This image embodies our concept of our identity, self-image of us as a person and an individual, formed on the basis of our own opinion of ourselves. This view is in most cases formed unconsciously, under the impression of past experiences, successes and failures, as well as on the basis of relationship of other people to us. As a result, we do not doubt the authenticity of our understanding of ourselves and act as if it were true.

This image of the self in modern literature is often referred to as the concept of "self-concept" (*I*-concept). As a scientific notion the term "self-concept" was coined in literature relatively recently, maybe that's why in literature, both domestic and foreign, there is no single interpretation of it, the closest in meaning to it being the concept of "self-consciousness". *"Self-concept" includes the evaluation aspect of self-consciousness. It is a dynamic system of ideas of man's self, which includes a proper understanding of your physical, intellectual and other qualities, and self-esteem, as well as the subjective perception of the influence of external factors of this person.*

R. Burns, one of the leading British scientists in the field of psychology, seriously studied the question of self-consciousness, defines the notion of *"self-concept"* as set of ideas of man's self connected with their assessment [16]. The narrative component of the *"self-concept"* is often called the image of *I* or picture of *I*. The component associated with the relation to oneself or to one's separate qualities is called self-evaluation or self-acceptance.

*"Self-concept"*, in fact, does not define what an individual is, but what he thinks of himself, how he looks at his active source and development opportunities in the future. "Self-concept occurs in a person's social interaction with other people as an inevitable and always unique result of mental development as a relatively stable and at the same time it is susceptibility to internal changes and fluctuations mental acquisition. It puts an indelible mark on all manifestations of human life – from the children to old age.

Studies related to *"self-concept"*, anyway, are based on the theoretical position, which can be reduced to four main sources.

1. The fundamental approach of W. James.
2. Symbolic interactionism in the works of Charles Cooley and George Mead.
3. The concepts of identity, developed by E. Erickson.
4. Phenomenalistic psychology in the work of Carl Rogers.

*Self-concept* was discussed in theoretical works of other authors. However, the system of concepts developed in the framework of the above of conceptual approaches, is the most productive. William James postulated difference of the two aspects peculiar to the integral *I*: *I*-conscious, a reflexive procedure and *I*-object – the content of consciousness, which in turn can be identified by such issues as the spiritual *I*, the material *I*, the social *I*, physical *I*.

In the first decade of this century, the study of self-concept is temporarily transferred from the place of the traditional channel of psychology into the field of sociology. The main theorists here are Ch. Cooley and George Mead, representatives of symbolic interactionism. They stressed the leading role of social interactions as a source of self-concept of the individual. Later E. Erickson suggested a genetic theory of the formation of ego identity.

Rogers argues that self-concept consists of representations of their own characteristics and abilities of the individual ideas about the possibility of its interaction with other people and with the environment, value representations associated with objects, actions, and ideas about the purpose, or ideas that can have a positive or negative meaning. He used a phenomenological approach to understanding self-concept, which is based on the following assumptions:

- Behavior depends on the angle of the individual perception;
- This perspective is subjective in nature;
- Every individual's perception is refracted in the phenomenal field of his consciousness, the center of which is the self-concept;
- Self-concept is both the presentation and the inner essence of the individual, which tends to the values that have a cultural background;
- Self-concept governs the behavior;
- Self-concept has a relative stability and causes quite stable patterns of behavior;
- Discrepancies between the experience of the individual and his self-concept are neutralized by defense mechanisms;
- Main motivation is the desire of every human to self-actualization [170, p. 12].

Thus, self-concept is a collection of all attitudes aimed at oneself. They can be specified in the following way:

- 1) image *I* – an idea of the individual about himself.;
- 2) self-evaluation – affective evaluation of this view, which may have a different intensity, as the specific features of the way I can cause a more or less strong emotions associated with their acceptance or condemnation;
- 3) potential behavioral response, that is, the specific actions that can be caused by self-esteem and the way I [16, p. 12].

In connection with the practical significance of self-concept as a basis for self-development and self-improvement of students let's consider these three basic components in more detail:

#### 1. The cognitive component, an image of *I*.

The idea, or image of an individual about himself, as a rule, it seems convincing, regardless of whether it is based on objective knowledge and subjective views. The subject of human perception may, in particular, become his body, ability, social relationships, and many other manifestations of personality. All of these elements are a way to describe the uniqueness of each individual through a combination of his individual features. This raises the question of the truth of an image of *I*, whether a man is capable of knowing himself, how objective his self-evaluation is.

Knowledge of man of himself can be neither exhaustive nor free from the estimated characteristics and contradictions. This explains the selection of the second component of self-concept.

## 2. Attitudinal component of self-concept or self-evaluation.

It implies a relation of the individual to himself, to his quality and condition, capacity, physical and spiritual strength. This is a personal judgment of self-worth, which is expressed in attitudes typical of the man. Thus, self-evaluation reflects the degree of development of his sense of self-esteem, a sense of self-worth and a positive attitude towards everything that is within the scope of his I.

It follows that a positive self-concept can be equated to a positive attitude towards oneself, self-esteem, self-acceptance, a sense of self-worth. Low self-esteem involves the rejection itself, self-negation, a negative attitude to his personality, a sense of inferiority. These terms are used interchangeably in many papers on self-concept. Self-evaluation plays a very important role in the organization of effective management of their behavior, without it, it is difficult or even impossible to define oneself in life.

3. The behavioral component of self-concept is the potential behavioral responses, that is, the specific actions that can be caused by self-esteem and the way I am. Every system is an emotional belief in progress associated with a particular object. Feature self-concept is that the object in this case is itself carrier of this idea. This ensures that all emotions and assessments related to the image I are very strong and stable, which has a strong influence on the activity of a person, his behavior, relationships with others.

Having highlighted the three main components of self-concept, we should not forget the fact that self-evaluation and self-image in psychological terms are inextricably linked and predispose a person to certain behavior. Therefore, the global self-concept is seen as a set of human systems aimed at oneself. However, these attitudes may have different perspectives or modalities. Usually, at least four major self-attitudes are distinguished:

1. Real *I* – attitudes related to how people perceive their current abilities, roles, their current status, that is, with his ideas about what they are at the present time.

2. Mirror *I* – attitudes associated with the ideas of a man about how others see him. Mirror *I* performs an important function of self-correction claims the man and his ideas about himself. This feedback mechanism helps to keep the real *I* in adequate limits and remain open to new experiences through dialogue with others and with oneself.

3. Ideal *I* is an attitude associated with the representation of a person, what he/she would like to be. It is formed as a certain set of qualities and characteristics that people would like to see at home, or roles that he would like to perform. The contradiction between the real and the ideal *I* is one of the most important conditions for self-development.

In addition to the three main modalities lines suggested by R. Burns, many authors identify another one, which plays a special role.

4. Constructive *I* (*I* in the future). The main difference between constructive *I* – *I* of the project from the ideal *I* is that it is permeated with motifs of action and they correspond more to the attribute "aspire". Within it are transformed the elements that a person accepts and sets for him/herself as an achievable reality.

It should be noted that any of the images of *I* have a complex, ambiguous in its structure origin, consisting of three aspects of the relationship: physical, emotional, and mental *I*.

For practical psychology and pedagogy there is fruitful desire of a number of authors to present the scheme of self-concept as a hierarchical structure. (Figure 1.3).

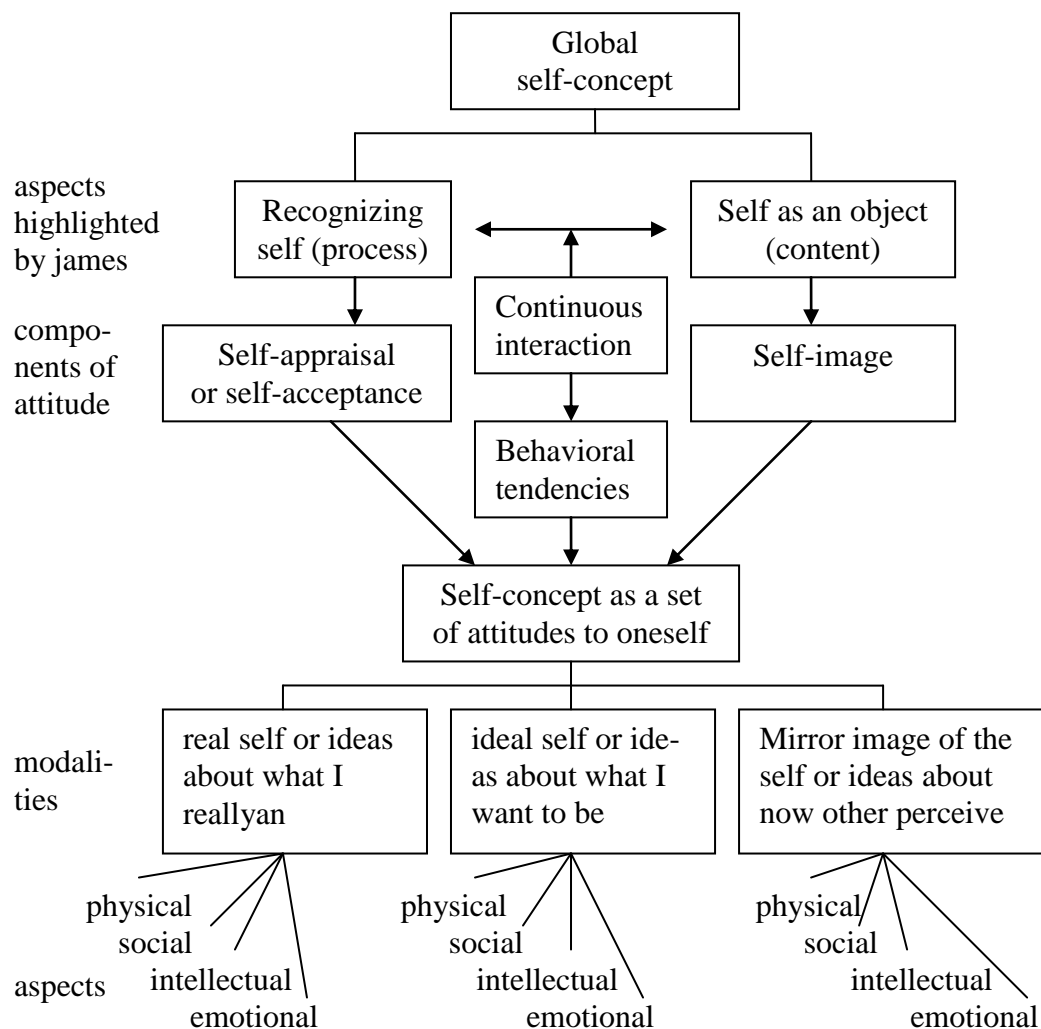


Figure 1.3 – Structure of the self-concept [10]

The global *self-concept*, as we can see from the figure, includes all kinds of facets of individual identity. This is a "stream of consciousness" in which an American scholar William James identified two elements – *Conscious I*, and *I-object*. However, this division is conventional; in a real mental life these elements are fused so as to form a single, practically inseparable whole.

*Self-concept* is not static, but a dynamic psychological structure, its formation, development and change are determined by factors both internal and external. Fundamental influence on the formation of self-concept and the process of socialization is exercised by a family. With age, more and more important in the development of self-concept becomes the value of experience and interaction with other people – at school, in college, in a variety of informal groups in society, and in the course of professional activities. Therefore, since its inception, it becomes active and contributes important condition in the interpretation of experience. The original relationship of self-concept with external influences is undeniable, but later it plays a greater role in everyone's life.

Although in many psychological theories self-concept is one of the central concepts, it is, however, still not yet wide-spread in teaching science, and is even less applied in the learning process. To use its formative role in the pedagogical process the following working definition can be accepted: self-concept is a certain sustainable, generalized, internally consistent and non-controversial view of a person of himself, fixed in verbal definitions. It contributes to the interpretation and motivation of a new experience and is the source of the expectations of certain actions in relation to oneself. Self-concept allows to discipline a person's thinking, concentrating it solely on the chosen subject, that is, in on a fixed goal, as well as to involve the person's subconscious with all reserves, hidden in it to achieve the desired results.

*Self-concept* is a dynamic set of attitudes inherent in each personality and aimed at the personality itself. They may change in the course of development and self-development of students during their studies at the university. This period in a person's life is the most favorable not only for training but also for the acquisition of skills for self-programming and self-development facilitating the disclosure of the full potential of the individual.

Numerous experimental and clinical studies made by psychologists have proven that human nervous system is unable to distinguish between the actual situation and a situation created brightly and in detail by our imagination. This allows students to synthesize or artificially reproduce and control the practical experience in the laboratory of his mind. Therefore, the image of the self can become the key to the identity of the student and his behavior. This image defines the scope of his capabilities, what he is capable of doing, or unable to do. Pushing the boundaries of the image, he expands the horizons of his abilities. One should remember the following:



Firstly, all our actions, feelings, and deeds (even abilities) are always consistent with the image of the self;

Secondly, it is quite possible to change the self-concept (or image) of oneself.

Formative role of self-concept is manifested in the fact that students must orient themselves on the expectation of success in life. Their continuous self-improvement will contribute to this. Psychological mechanisms of action of self-concept to encourage students to self-development and self-education consist in the fact that they excite in them an experience of internal contradictions between the achieved and the necessary level of personal growth and cause the need to work on their self-improvement.

A large role in shaping the personality of the student is played by his world viewing, values, and ideas of purpose or intent, which can have a positive or negative direction. Self-concept is a complex structured picture, including both self, and relationships with other people, as well as positive and negative values, connected with the perceived quality and relationships of *I*. It can be widely used for self-development of the individual student, because it provides information about what to do for his self-improvement. We should learn the mechanisms of formation and realizing of self-concept.

#### ***1.4.2. The role of positive thinking in the realization of an image “I”***

It is known that the higher the proportion of positive attitudes of a person towards himself, the more comfortable his life is. Therefore a success-oriented person's stand in life should be formed with the help of positive thinking. Its essence is, on the one hand, to strengthen the positive image of *I* under the influence of successful actions, and, on the other hand, not to let it collapse under the influence of failures. Only with such attitudes towards oneself and one's actions psychological image of self can have the opposite impact on the natural essence of man.

Psychology of the image of self sheds new light on the concept of positive thinking, and explains why in some cases it gives a positive result, but in other cases there is no effect. The point is that positive thinking manifests itself only when it coincides with the views of the person himself. If there is no such coincidence, one has to change his view. Everything we do in life depends on our internal attitudes. It depends on our thinking, what actions we commit, and they accordingly affect the feelings, mood and behavior of other people.

Success virtually depends on how positive our attitude to life is, on our mood. The belief that we are tuned actively and positively, will allow us to control the environment in which we are. In this way we will be able to make the circumstances work for us, not against us. Another extremely important point is a sense of purpose, and that's why it's better not to fall under the influence of

less purposeful people who, unfortunately, comprise a majority. One of the main components of success is an absolute certainty in the rightfulness of one's cause and purposefulness, and any real success always starts when a person has faith in oneself.

Self-confidence is a reflection of the measures of one's personal freedom from guilt, rigidity, anxiety. When people talk about the strong character of a person, they have in mind, first of all, his strong will. And when they talk about the strong I, they mean the person's ability to self-organization and self-realization, his mental stamina and self-esteem, as well as his great social potential. There exist the following six indicators of the strength of I:

- 1) tolerance to external threats, to psychological discomfort;
- 2) freedom from panic, resistance to feelings of guilt (the ability to compromise);
- 3) ability to effectively suppress unacceptable impulses;
- 4) balance of rigidity and depression;
- 5) control and planning;
- 6) adequate self-esteem.

Strong *I* of a person is manifested in his self-respect as a generalized characteristic which develops in early childhood, and it is difficult to change. The level of self-esteem is reflected in the dominant motivation. Adequate self-esteem involves a small and well-controlled feeling of guilt, independent of others' evaluations. It is noted that the lower the level of self-esteem, the more intolerant a person is to criticism and humor.

Weak *I* suggests excessive development of a person's psychological protection that increases of the inadequacy of perception of the world around them and determine the appropriate behavior. Low self-esteem leads to a tendency to self-deception, fear of the truth, the dominance of motivation and self-assertion of the high development of many forms of psychological defense. It can manifest itself as a feeling of inferiority, and hide behind the self-confidence and bravado. People with intrinsic low self-esteem usually tend to inadequately assess the others: expect from them either aggression or praise. The main method of compensating low self-esteem is to develop self-confidence.

Self-confidence is a property that is not given to man by birth. A great influence on its formation make life experiences, especially from childhood. A certain role is played by upbringing, especially if it does not suppress the natural human desire for development, orientates one on adjustment to life in society, on ambition and competitive thinking. Among the factors that prevent the formation of a person's self-confidence, one can call the difficulties connected with sexual instincts in childhood, cramped living conditions, negative experiences in communication. "Contamination" of the human psyche by television and the press brings in an additional contribution to the development of a sense of

inferiority, because for a healthy self-confidence optimism and belief in the positive is needed.

There is considerable evidence that one of the prerequisites of self-confidence is the optimistic view of the world and its possibilities. Confidence is accompanied by a sense of ability to control one's thoughts, feelings and behavior. At the same time it means the conscious planning of one's life for a certain period. Confident people often correctly assess the surroundings. They are more independent of external circumstances, as well as the opinions and expectations of others. At the same time a great role in the formation of confidence is played by the principle of self-hypnosis. If we fill our minds with thoughts of doubt and failure to achieve the goal, about insurmountable difficulties on the road to it, the spirit of unbelief will fix this in the subconscious as the dominant thought and will bring a bad luck. Self-confidence will help us to overcome the obstacles that will be encountered on the path to success.

"The formula of confidence" in oneself consists in the following attitudes:

1. I know that I have the ability to achieve my objective and therefore require of myself persistent and sustained actions in this direction.

2. I am aware that my dominant thoughts are reflected in the actions and are gradually transformed into a physical reality. So every day I'll be thinking about what I wanted to be like and then transform this image into reality by constant self-improvement.

3. I know that in accordance with the principle of self-hypnosis every desire will gradually begin to look for and find effective means for its implementation.

4. I have clearly stated and recorded a purpose in life for the next 5 years, and will spare no effort to achieve it.

5. I am quite aware that the wealth and social position are of value if they are based on truth and justice, so I will not participate in matters that require immoral acts, and could cause harm to other people.

The method of positive thinking does not apply to any specific external circumstances, certain negative habits and qualities of character. It's absolutely impossible to perceive any particular situation positively if a person keeps a negative view of himself. But one can not deceive oneself or try to convince oneself of what one actually does not believe. You need to have an adequate, realistic picture of yourself, your strengths and weaknesses. Our self-image has to be a fairly close replica of the original *I*. Having mastered the psychology of the image of the self, the person creates a basis for self-hypnosis. So do not criticize yourself, nor express disapproval of yourself, or humiliate yourself.

As a result, we will feel ourselves ordinary people who are entitled to shortcomings. At the same time, we will feel that our own *I* has inherent worth and dignity. To the extent that a person limits oneself and his abilities, allows

himself to experience negative emotions, he is literally strangling his vitality and creativity. But if the self-image is optimistic, there will appear a persistent sense of self-confidence, and one can easily find a reason for self-expression and self-realization.

Possible *I*'s do not come out of nowhere, but are the result of combination and transformation of various self-concepts. Sometimes they occur in the process of fantasizing, when in the mind of a person there appear different images of himself, sometimes they are based on ideas about what one should and should not do. Many scientists believe that the "possible selves" are only the starting point for the transformation. Ultimately, students should set clear goals, which should correspond to their values, otherwise they are unlikely to gain them. It is known that people find it difficult to change behavior if this is not consistent with their value preferences.

Each person sees the world around him from a certain angle, that is, in accordance with their beliefs. Therefore, he must consciously and skillfully generate this ability of his to create, and not to seek to justify their inaction or failure. Only with such an attitude towards oneself and one's actions can psychological self-image have the opposite effect on its natural essence. It is known that failures have a corrective function. A well-known proverb states that a person learns from his mistakes; and failures make him "discouraged." (in Russian version "his hands go down"). In addition, it is recognized that it is success that leads to success, and such a person has, figuratively speaking, "grows wings." As a result, coordination of *I* is enhanced, which actually means one's personal growth.

One must believe not only in oneself, but also in the success of the matter. Faith is a state of mind that can be caused or created by constant repetition of some thought. It should be cautioned about the difference between belief in oneself, which is based on the knowledge of what one knows and what one can do, and egotism or what seems to us. Belief in oneself should never be proclaimed, but only displayed in reasonable actions.

If a person understands himself and is plans his life, he thereby helps his positive emotions to become dominant in his mind and alongside with that eliminates any manifestations of negative emotions out of mind. An important role is played by the force of habit, which grows out of the repetition of the same actions, thoughts or words. Once a habit has formed, it automatically monitors and guides the body. Therefore it is necessary to find a thought that is transformed into a powerful factor in the development of self-confidence. This idea is as follows: voluntary and, if necessary, by force send your thoughts and efforts in the desired direction until a habit forms.

In this regard, we present here some important practical recommendations that can be used by students in the pedagogical process (see Appendix A). One

of the most productive ways to change one's mental habits and the future direction of one's life is considered "to go on a diet" of 21 days under the name of "positive mental thinking." During this period, a student must maintain daily complete agreement of his thoughts and actions with the intended objectives and the image of the person he wants to be. An adult requires 14 to 21 days to develop new habits of thinking. But usually, getting rid of negative habits requires quite a long time. To do this, it's necessary to take a number of daily activities, the totality of which can be summarized as follows.

1. **Visualization** is the most powerful way to modify images, as a result of which they become a reality. These images reinforce the desire, deepen faith, enhance a person's will-power and perseverance. Their power is exceptional. Visualization is characterized by the following parameters:

- frequency of imagination of new images, it is desirable to do this all the time;
- sharpness or clarity of imagination;
- intensity, which means the amount of emotion in one mental image;
- the length of time during which the mind holds the desired image.

With the help of visualization one can convince his subconscious in gaining repeated success. As a result, it will start managing words, actions and emotions so that they conform to the images of the imaginary success and contributed to its achievement.

2. *The statements* must be positive, refer to the present time and have individual character. In fact, they represent the orders addressed by conscious mind to the subconscious, which erase the old information and reinforce new positive thoughts and actions.

3. *Verbalization* or uttering statements aloud, standing in front of a mirror and saying emphatically and emotionally. In this case, the spoken words must be positive and assertive.

4. *Staging of the role*. It is necessary to move, speak and act in accordance with your ideal image.

5. *Recharging your brain with words and images* that are consistent with the direction of growth. To do this, you should regularly read books and magazine articles on your specialty, on related topics and those of general culture nature. This reading should be directed to the professional and personal growth.

6. *Positive communication* or contact with the right people. You should go around with the winners, to be especially careful when choosing friends and acquaintances. Studies indicate that the choice of a group with a negative reputation is sufficient to condemn a person for slips and low achievement in life. Our environment is the people with whom we associate ourselves and unconsciously assimilate the attitudes, habits, behavior and opinions of others. To meet new, useful people it is usually necessary to stop communication with

the old environment, and especially to get rid of the relationship with non-achievers and negativists.

7. *Teaching others* what we have learned to do. Trying to express and explain a new concept to someone, we do understand it even better. In fact, we know a subject to such a degree that we can teach other people so that they understand and apply it in their lives and activities [42].

These methods of mental programming work precisely and reliably. They are necessary for personal and professional growth. To get the most out of these techniques it is required to spare no efforts to self-improvement. It's necessary to have the ability to believe and patiently, persistently work hard, knowing that there is a cumulative effect on the investment effort.

#### **1.4.3. *Imagination in the system of self-concept***

In human life, a very important role is played by the imagination. *Imagination is the ability to represent a missing or not really existing object, to keep it in mind and mentally manipulate it.* According to the famous Scottish philosopher D. Stewart, the gift of imagination is an excellent spring of human activity and the key to the improvement of man himself. Man always acts in a certain way, feels something, or does something in accordance with those concepts of self and others, which, in his opinion, are true. Such is the fundamental law of our thinking, such is our mentality.

Imagination is a special form of the human psyche, which stands apart from the rest of mental processes and at the same time occupies an intermediate position between the perception, thinking and memory. Its specificity lies in the fact that the imagination is probably characteristic only for humans and is in a strange way connected with the activities of the body. Humanity still knows little about the mechanism of the imagination, including its anatomical and physiological basis. Questions about where in the brain imagination is localized; with the work of which nerve structures known to us it connected are still not unraveled. At least we know about this much less than about feelings, perception, attention and memory, which have been studied in a greater detail.

Thanks to the imagination a person creates, reasonably plans his activities and governs them. Almost all human material and spiritual culture is the product of the imagination and creativity of people. It is of great importance for the development and improvement of the human species; it also takes a person beyond his momentary existence, reminds him of the past, and reveals the future. The past is recorded in memory images, randomly resurrected at will; the future is represented in dreams and fantasies. Imagination is the foundation of visual and figurative thinking that enables a person to navigate the situation and solve a problem without the direct intervention of action. It helps him greatly in

cases of life when practical action is either impossible or difficult, or simply impractical or undesirable.

Of perception, which is the process of receiving and processing of different information, which concludes with the formation of the image, the imagination is different in that its images do not always match the reality, they have elements of fantasy and fiction. The mind of man cannot be inactive, so that's why people dream so much. Human brain continues to function even when it does not receive new information or when it does not solve any problems. It is at this time that imagination starts to work. It is established that a person is unable to stop the flow of thoughts, to stop imagination at will.

In the course of human life imagination performs a number of specific functions:

1. Representation of reality in images that makes it possible to use them while solving problems.

2. Regulation of emotional states and the ability to at least partially satisfy many of one's needs as well as to remove the tension generated by them.

3. Voluntary regulation of cognitive processes and states of a person. With skillfully created images a person can pay attention to events. Through images he is able to manage his perceptions, memories, and statements.

4. Formation of an internal plan of action, it is the ability to perform them in mind, by means of manipulating with images.

5. Planning and programming of activities, compiling programs of the process of their implementation and evaluation of their correctness.

With the help of the imagination one can control many psycho-physiological states of the body, set it on the forthcoming activities. There are known facts showing that with its help, by purely strong-willed effort a person can affect organic processes: to change the rhythm of breathing, heart rate, blood pressure, body temperature, etc. Imagination is at the heart of autogenic training, it is widely used for self-regulation.

It is known that our nervous system is unable to distinguish the real situation from the imaginary one. It automatically reacts to information received from the brain. Therefore, what we think or imagine is real for us. The phenomenon of hypnosis is that the hypnotist brings the subject to the point where he starts to believe unconditionally in the veracity of his claims, and therefore acts accordingly.

So, not the true nature of things determines our actions and feelings, but their mental images. If they are distorted, the response to external stimuli will not fit the circumstances. We automatically respond to what we believe is the truth. Understanding that our actions, feelings and behavior are just a result of our ideas and beliefs provides us with a powerful lever for changing the

properties of personality. Thus, a person can hypnotize himself into false beliefs, as the power of hypnosis lies in convincing.

In the process of liberation of man from self-hypnosis relaxation plays an important role. After all, your beliefs and habits were formed without coercion. Only fully relaxed, releasing the vise in which a person holds himself, his imagination, creativity, a person can go to a different level of self-perception. For example, only in a relaxed state a stutterer can speak quite normally. Therefore therapists recommend relaxing periodically, giving up the load of problems and concerns. What and how we say is very important for instillation, but no less important is what we do. And thoughts are the most important tool and method of instillation, because they control the tone of voice and to a certain extent our actions.

Instilling is different from self-hypnosis in that we use instillation when consciously or unconsciously influence others, while using self-hypnosis we influence ourselves. For us to be able to instill something into another person, his brain must be in a neutral state and to be open to us. The instillation is one of the most subtle and powerful principles of psychology. We use it whenever we say and think, but if we do not realize the difference between negative and positive thinking, it can not bring success but failure. We can only instill what we believe ourselves.

Faith is one of the greatest forces in the world, when directed at the good it is faith that is the source of the greatest wonders. If one believes in achieving his goal, he will certainly reach it. The law of faith is this: beliefs define reality. Belief in oneself precedes the results, and predetermines them. The line of conduct is always consistent with the self-concept, with conception of oneself. By changing them, we immediately begin to change ourselves.

Our outer world is an expression of the inner world. One cannot think, feel or behave outwardly otherwise without changing one's program, the concept of oneself, or what is inside. It's possible to begin to imagine ourselves as we want to be and not what we really are. The success is largely determined by our expectation. Positive changes are made possible by the fact that our self-images are subjective, not objective. They are based not on facts but on impressions perceived by us as true.

Thanks to our own self-concept, we can gain what we think about most of the time. Our dominant thoughts and aspirations become reality. Such changes in ourselves, enabling us to enjoy of life, are not easy, they require considerable effort. We must be willing to discipline our thinking, concentrating it solely on his chosen subject, rejecting all unnecessary. The results we will obtain in this case will be swift and will fully compensate the effort. Development of self-concept has three requirements, which are the key for changing the direction of life:



- Firstly, a sincere desire to change;
- Secondly, a positive attitude towards oneself and one's capabilities;
- Thirdly, to be persistent in achieving goals.

Before becoming someone, we should imagine visually what we want. Visualization, according to K. Turner, is a crucial factor for success. Students must learn to visualize clearly the desired, to imagine, to concentrate their attention on what they want, to try to see it. They should see it vividly and clearly, and their emotions will respond to it positively, following which physiology will also respond to these commands. It's necessary to practice visualization constantly, and try to see ourselves as if we have actually achieved what we wanted [198, p. 199].

Thus, a person's success largely depends on his imagination. It's a psychic projection of images. Directed imagination is the main tool in learning the practice of mental self-improvement. By only a trained force of imagination, one can beneficially affect one's mental and physical well-being at will. For this it is necessary to learn how to create images, see with an inner eye the content and intensity of the imaginary reality and intensify its effects on the body by concentration of thought. Then the conscious mind will start to transform them into reality. It uses a psychic projection of images like telecommunications, i.e. the creation of the information in the form of pictorial images or thought-forms. These ideas are at the heart of such neurolinguistic programming technology as creating mental images.

Most people envision a situation from the past, when they failed, and thus virtually provide an opportunity for their imagination to actually destroy their potential. Few people know how to develop the ability to visualize the future in a positive light for them. Rather than bring the experience of the past into the present, students must learn to bring their future into the present, that is, to imagine that they already have all the traits and qualities that they want to develop in themselves.

*Preparatory exercises that use a variety of ways to employ imagination*

1. Sit in a chair. Close your eyes and relax your body. Focus. Interpret and explain the real reasons for the way you feel, your state of mind. Do not distract attention to other topics.

2. With your Inner voice instill: "I want to feel the way I'd like to. I am memorizing the feelings of this new state, and putting them in my memory. "

3. The past may fill the mind as a reality and dictate its images. If it's negative images of the past, use the methods of "erasing" unwanted negative memories.

4. Focus your attention on the new experience, and the thought will pass into a new state. You need to create a new present, and it will bring an image of a healthy and happy real future. Its creator is creative thinking.

5. You should master the unusual power of imagination that creates an opportunity to focus on particular aspects of reality, which is necessary for the impact on the body. Begin to think in images. To begin with, in the simplest ones. Create mental images in your mind of what will bring you positive memories.

6. Internal forces slumber, they need to be awoken by the desire, which needs an incentive. It can be a wish to heal itself. Create in your mind positive thought-forms. In them you must see yourself healthy and vigorous.

The concept of concentration of thought and imagination is that one should train this art gradually, without speeding up the events, using special exercises every day for 10–15 minutes. As a result, a person will learn to achieve the desired. This will be the success gained by intense labor and concentration of all forces. Exercises are aimed at improving creative thinking, which is one of the main challenges in the practice of mental self-improvement. If you learn to develop your imagination and to manage it, you can achieve improvement in your health and mental well-being, strengthening of faith in your abilities, to influence your actions and deeds.

Make yourself watch with double attention what you are viewing, focus your attention suddenly, like setting up a microscope or binoculars for a clear image. Involve your will into work. Train immersing your mind into full forgetfulness. Intellectual evolution of the mind is to learn to recognize a special state of consciousness. Self-consciousness of awakening of unusual abilities is achieved by mastering real and imaginative thinking. Master the art of directional imaging [139, p. 559, 560].

*Exercises that develop creative thinking and imagination*

1. In position with eyes closed mentally draw any image. Then, without opening your eyes, draw with a pencil a mental image you created on paper in several ways. Then open your eyes and compare with what you have drawn in your imagination. Train this technique, trying to achieve an exact match of the imaginary and depicted.

2. Place an object (such as a vase) on the table. Turn your back on it or go out to the next room and close your eyes. In your imagination recreate this object as an exact copy of it, then visually imagine where it stands. Then ask someone to put it to another place. Then slowly create its image and with an inner vision visually determine its new location. Mentally created image must match the real one, and only then will you define the new location, where it was moved. Then you can test whether you have located the object correctly.

3. Put a pencil on the floor. Stand up straight, then bend over for it. Firmly grip the pencil in your hand. Imagine in your mind that you hold in your hand a heavy weight. With great effort, straining all muscles of the body you are raising

"it" the shoulder level, and then with your arm stretched lift it above your head and then put it back to the floor. After that, from the imaginary tension, release all the muscles of the body and relax. Repeat the exercise several times. Then, instead of weights lift an imaginary light feather. Feel the difference in perception. In this way, moving any object, you change in your mind its weight and volume. Make the effort adequate to the imaginary gravity of the object.

4. Sit on a chair and relax your body. Stay focused and close your eyes. Imagine in your mind a lemon. You cut it into slices, juice flowing from hand to hand. One slice you put into your mouth. You should feel in the mouth the taste of citric acid. Repeat this exercise for as long as you reach a certain effect. It entirely depends on the training, and on the quality of the force of directed imagination.

5. Imagine in your mind one of familiar smells. Reproduce it so that to smell and feel it in reality. Repeat this exercise for as long till the smell is felt clearly and quickly.

6. In your mind, using your imagination, create an image of any of your belongings. The image must be exactly the same as the reality. Project the image so that you have a full impression of the sense of touch. Imagine that you touch this thing, take it in your hands, put on yourself and wear. For practice, think of new sensations: taste, smell, touch and hearing.

7. Standing, bend the leg at the knee and turn your foot to one side, and to the other. Straighten the leg. Close your eyes and focus attention. Mentally repeat this exercise, creating exactly the same movement and physical stress in your mind. Achieve real sense of the muscles and joints.

8. Starting an exercise, count the beats per minute. Then create in your mind a situation in which you see yourself on the treadmill, start to run slowly at first, then faster and faster. Breathing, the heartbeat increase, the muscles begin to tire. When the exercise is over, measure the pulse again. Determine, whether, its rate has risen. If it has, the purpose of this exercise is achieved.

9. You can "make" blood vessels expand in the process of autotraining. Lie down on your back and close your eyes. Relax your body. Focus your attention on your physical condition and instill, repeating to yourself, "My hands are getting warm and heavy."

10. Visualize in your mind that you are on a frosty day in a field, naked and standing barefoot in the snow. You're cold, you start shivering, and the body gets covered with goose bumps. You should feel the chills and cold. Then perform another exercise. You are in a desert, the heat is unbearable, the bright sun bakes and blinds, you are thirsty, your throat is parched. You should feel the heat and the thirst.

11. Create in your mind a situation in which you are swimming underwater, and you do not have enough air. You cannot breathe, and you slow down

breathing. But in reality, breathe normally. Then imagine that you are out of the water. There is an opportunity to breathe freely. You increase respiration, but in reality you are breathing normally.

12. Remember the feeling that you were experiencing at the time of joy and happiness. In your imagination reproduce the familiar feeling and positive emotions. Try to hold in your memory the joyful feelings, make them your experiences, try to repeat them.

13. By means of directed imagination remove pain. For example, you feel a headache. Lie down on your back and close your eyes. Relax your body and focus attention. In your mind, focus your mind's eye of an imaginary point between the eyebrows. Apart from concentrating, focusing your attention on this point, while thinking do not leave any extraneous thoughts. Create an imaginary point motion over different parts of the head. With this point massage your head, feel the dilation of blood vessels. The headache will pass away [139, p. 561–564].

#### ***1.4.4. The role of modeling in the formation of self-concept***

Model is a simplified description of a complex phenomenon or process. A model of an object is typically a miniature version or representation of the object itself. The term "model" refers to a description or analogy used in order to facilitate visualizing anything inaccessible to direct observation. Modelling of the behavior includes the observation and description of effective mechanisms underlying the outstanding achievements of any kind.

In the process of modeling a complex event or series of events are broken down into smaller parts, allowing to reproduce in some way the original object. The problem of behavior modeling is to create a practical map, or "model" of behavior that anyone could play. Its purpose is to establish the most significant elements of thought and action needed to achieve a specific result or reaction.

Neurolinguistic programming (NLP) arose from modeling human behavior and mental processes. The main objectives of NLP are to model specific or exceptional ability for subsequent assimilation by other people. The idea is to draw up a map tool that would provide a practical application of the modeled strategies and would allow us to operate more efficiently. With this "precision" or "reality" card is inferior to the significance of its "utility". Thus, the instrumental use of cognitive strategies, models or forms of human behavior involves these into structures that can be used for any practical purpose.

Purposeful behavior is impossible in the absence of a thorough strategy. The development of specific strategies of thinking is an integral part of the modeling process in NLP. First of all, each of us must learn to imagine ourselves in the place of else ("in another person's shoes"). In NLP terms this is called a perceptual shift, and is a mode of perception, in which we see the world through the eyes of another person and hear through his ears.

By itself, the modeling process is very simple. Be clear about what you are missing to turn up in something at a higher level, and pick up the right model of a man who succeeded in your area of interest. Then imagine what this man could think of at the beginning of his road to success. We can also rely on our own memories. Inside any of us there are a dreamer, a realist and a critic, who under certain conditions can act for our benefit.

R. Dilts, a leading theorist and practitioner of NLP, has developed a strategy model of Walt Disney, the man who achieved worldwide fame for his films. The main emphasis is placed on the following circumstance: depending on the time and situation, a person tends to approach business either creatively, or critically, or realistically. In NLP the existence of many parts within every human person has been accepted. It has been proved that if these parts are working inconsistently, there increases the frequency of conflict development and efficiency of the whole person decreases. And well-coordinated work of these parts contributes to the achievement of excellence.

Disney's strategy is based on the idea to enable each of the three "characters" (the dreamer, the realist and criticism) that exist in our minds, to contribute to the cause. To do this:

1. Think of what you would like to succeed. Prepare to imagine yourself being each of the three imaginary characters in turn.

2. First of all, remember the time when you were full of creative energy and new ideas. Look at the world through the eyes of a dreamer and try to reproduce your experiences with the utmost authenticity. In this case, run the memories through all modalities, and then collect the resulting visual, auditory and tactile images together so that you have the full sense of presence in a situation that you have imagined. This feeling will serve as a kind of anchor for the future experience. If you cannot imagine being full of creative energy, imagine in place of you a famous creative person and try to feel the same, what he must be feeling at this time. After that, take your previous position.

3. Then mentally you will be taken at a time when you were a careful, well-organized realist. If you like, you can imagine other people with such qualities. When your idea will reach a sufficient degree of brightness, go on to the image of a realist, connecting your state with a certain position of the body in space. After that go back.

4. And finally, take the position of a critic. Think of those situations when you or someone you know found weaknesses in the arguments and decisions of opponents. Imagine yourself in the role of a critic and fix your feelings, then take your original position.

5. Now that you own the three positions described above, you can begin to address the problem. Move to position of a dreamer and imagine all known

to you creative solutions to this problem. At this stage, there should not be any judgment or criticism, so that no idea should be rejected. Try to get as much pleasure from your reverie as possible, and at the same time, become familiar with this creative state. When you run out of creative ideas, get out of position.

6. Take a realist position and start to realize your fantasies to life. Then go back to the original position.

7. After that, take a position of a critic and do not spare efforts to detect any possible obstacles. Do not forget about your goal – to solve a particular problem. Then return to the neutral position again.

8. Now take the position of a dreamer again, paying more attention to the practical side of things and your criticisms. Try to treat obstacles and different circumstances, limiting the freedom of your actions, creatively.

9. Continue to carry out the actions described until the problem is completely resolved. Over time, your inner "characters" will work more coherently and clearly. Thus they should, combining their efforts, cope with the problems, and not interfere with each other [5].

Each of us has internal resources necessary to improve the efficiency of our operations. And we should move one of the most effective strategies of our memory into a new sphere of activity. For example, from the field of sport into professional sphere. It's necessary to evaluate the merits of proven effective strategies regardless of specific circumstances or situations.

The ability to use models to change strategies is the essence of the so-called accelerated learning. We can significantly speed up and intensify the usually sluggish current learning process by using our own effective strategies. We can also use for this purpose the experience of others. Nevertheless we certainly needn't expect to reach their level immediately. It should be remembered that each of us can make good use of our skills and thereby achieve success in life.

People, who are successful in any field, often do not think about the degree of perfection, unless it is pointed out to them by others. Moreover, they often cannot explain what and how to do in order to succeed. Their skills usually reach a level at which a person operates unconsciously, as if automatically.

The traditional view is that learning any skill includes four stages:

1) an unconscious ignorance: not only do you not know how to do something, but you also do not know that you do not know it;

2) deliberate ignorance (incompetence): You do not know how to do something, but have already found your limitations;

3) conscious knowledge (expertise) you have mastered the skill, but have not yet mastered the mastercraft;

4) unconscious knowledge or habit: forming a habit when individual skills are merged into one, the ability becomes unconscious.

Long practice helps each person to reach the fourth stage. For this consciousness defines the purpose and allows the subconscious to perform the task, freeing attention to other ends. Based on this level of training and some technical methods, we can transfer any skill on the master level of the unconscious. The human brain has no limits preventing it from acting in this way. The purpose of training by NLP method is to use intuitive skills. As is the case with any physical skill, at first, to master this method one will have to make some conscious effort and practice.

The ability to learn continuously during the whole life and to learn effectively, as a rule, without teachers is one of the most profitable sides of the NLP practice. And it meets an ever growing human need in self-learning and self-improvement, due to the acceleration process of aging of information and rapid updating of knowledge. This knowledge should be used when modeling the qualities necessary for success.

#### ***1.4.5. Using self-concept for self-development and self-improvement of the student's personality***

As it is known, the identity is the totality of its three main components: a biogenetic dispositions, the impact of social factors (environment, conditions, rules) and its psychosocial core – *I*. Psychosocial core is the inner essence of a person which has become a phenomenon of the mind determining the nature, motivation, a way of relating their interests with the public ones, the level of claims, the basis of the formation of beliefs, values, worldview. It is also the basis for the formation of a person's social feelings: self-esteem, duty, responsibility, conscience, moral and aesthetic principles, etc. Thus, *I* is an essential element of the structure of personality, it is the highest, regulatory and predictive spiritual-and-semantic center.

Subjectively to the individual the person acts as the image of his *I*, it is the basis of internal self-assessment and represents the way in which the individual sees himself in the present, the future, what he would to be or could be if he wanted to. The process of correlating the image of *I* with real life circumstances manifesting itself in motivations and orientation of the personality, serves as a basis for self-education, for a continuous process of self-improvement, self-development.

All people probably tend to develop a desire to maximize every possible side of their self, but the limitation of possibilities makes each person approach this realistically – to choose only certain aspects of personal development and according to them to set ultimate goals, the achievement of which a person associates with success in life. When a selection is made, self-evaluation is

measured relatively to claims: it increases if they are implemented, and decreases if the person fails to implement them.

In the classical concept of William James the idea of actualization of an ideal *I* as the basis of the concept of self-evaluation, which is defined as a mathematical relation of a person's the real achievements to his claims. So, those who in reality reach characteristics that define their ideal image of personality, must have a high self-evaluation. If a person feels the gap between these characteristics and the reality of his achievements, his self-evaluation is likely to be low. William James defined self-evaluation, using the original formula:

$$\text{SELF-EVALUATION} = \text{SUCCESS} / \text{CLAIMS}$$

With this equation he actually shows two ways to increase self-evaluation. Indeed, a person can improve his self-image, either by increasing the numerator of this fraction, or by decreasing its denominator, because for self-assessment only the relationship between these indicators is important. As W. James wisely noted, our self-feeling in this world depends entirely on what we set out to become and what we set out to accomplish.

A number of social roles or attributes are not meaningful benchmarks for us, and therefore are not especially important for our self-evaluation. Each individual is free to choose the standards and values against which he will assess the success of his achievements. Choice, provided by life is great, and from that on it all depends on the position of the person. However, choosing the guidelines and criteria for evaluation of our achievements, we are still somewhat limited, because we cannot ignore the facts.

Many theorists believe that on the self-concept depends, what goals we set for ourselves, how we evaluate the success of gaining them, as well as the impact of success and failure on our goal-directed behavior in future. In other words, *I* is the basis of self-regulation. For example, some people prefer the hard targets, because their self-concept allows them to believe in their own ability to achieve them. Probably, it is connected with the idea of their owning an ability to learn, or a large work capacity, or an ability to retrieve the correct paths leading to the goal. With this confidence, they can imagine themselves reaching their targets and to focus efforts on it.

So, success is achieved through harmonic management of consciousness and sub consciousness. This will enable students to achieve goals more quickly and with less effort. To do this, they first of all, must learn to understand themselves, their capabilities and limitations, identify their skills and talents and develop them actively. In this awareness of their self-concept and further self-development and self-improvement based on it will help them. Appendix B provides practical advice on awareness and the formation of self-concept.



### **Questions for self-control and verification**

1. What is the essence of a person's self-concept?
2. What are the theoretical principles that became the basis for the study of self-concept?
3. What are the requirements to self-concept?
4. What are the three components of self-concept?
5. What is the role of positive thinking in the awareness of self-concept?
6. What is the role of imagination in understanding self-concept?
7. What are the functions of imagination?
8. The definitions of "real-I" and "ideal-I".
9. Expand the content of visualization.
10. What is the role of modeling in the awareness of self-concept?
11. What is the content strategy of U. Disney?
12. What is the role of awareness of self-concept in self-development and self-improvement of the student's personality?

## **1.5. Development of the student's personality in the course of professional training and education**

### **1.5.1. *The problem of formation and development of personality and its study***

The problem of formation and development of personality has always been of great interest. Even in ancient times, philosophers and thinkers thought about the fact what man is and what he can do. Issues related to human potential acquired new shapes and meanings corresponding to the spirit of the age and the level of development of a society. Our time is characterized by high intensity of information, industrial and social processes. In these circumstances, the human factor is playing an increasingly important role. And the value of an individual increases both at the level of an individual personality and at the level of humanity as a whole.

Therefore the problem of identity has become central to the psychological and educational science. The root cause is that the man is in the focus of social and economic processes. O. Vishnevetskii rightly notes that having adapted earlier to life in a carefree national and social slavery, a man unexpectedly fell in conditions of freedom and was forced to change his position – to become a responsible, active, enterprising citizen, who must now live only through his own efforts, his initiative.

The concept of "personality" is multifaceted and multidimensional. In the "Ukrainian of Pedagogical dictionary" personality is defined as the union of

mental (including psychophysiological and socio-psychological) features and directivities (needs, motives, interests, outlook, beliefs, etc.), like temperament and character traits, abilities, characteristics mental processes (feelings, perception, memory, thinking, imagination, attention, emotional-and-volitional sphere) [38, p. 243]. A variety of structural models of personality is determined by the difference between conceptual approaches to them by various authors. Today, there are over 70 definitions of the notion of "personality", and about 25 definitions of its structure.

But a clear substantiation for the general explanation of the concept of personality, which would serve simultaneously as the subject of relationships, conscious activity, and a stable system of socially significant features that characterize an individual as a member of society, has not been found yet. A person's activity is displayed in the diverse and multifaceted actions aimed at transforming the world, change of the personal mental state, his self-improvement. It is generally accepted that personality is the result of socialization of an individual in the process of ontogenesis.

A human is a multi-faceted creature, and contemporary works on the problem of personal identity development touch a variety of aspects of this question. For example, B. Ananiev, L. Vygotsky, I. Bech, A. Bodolev, V. Rybalka, S. Rubinstein, and other scientists, emphasize the importance of psychological personal qualities. N. Nichkalo, S. Sysoyeva, I. Zyazyun, V. Suhomlinskiy, O. Tarasova, speak about the role of pedagogic creativity in the development of an individual. Many works are devoted to the spiritual, moral and ethical dimension (V. Kudin, A. Maslow, C. Rogers, W. Frankl, G. Skovoroda, et al.). The theme of the physical development of an individual is developed by K. Yaresko, V. Rashkovskaya, V. Labskir, A. Tinyakov, et al. Needless to say how many studies have been devoted to intellectual development.

Clearly, there are many aspects of personal development: spiritual, mental, moral, ethical, intellectual, creative, physical, psychological. In this case, the scientists point out the importance of comprehensive and harmonious development. Despite the wide interest in the problem, the very notion of "personal development" is not quite clearly determined. In this connection it is interesting what kind of meaning the present-day scientists put into this concept, and what role in this process is played by self-consciousness of personality and by external conditions.

The most characteristic areas in the study of personality in the first half of the twentieth century were behaviorism and psychoanalysis. Within the behavioral direction the term personality refers to the experience that a person acquires during life, those behaviors that are produced in the course of his/her

life. According to R. Skinner, in order to explain human behavior, you need only examine the functional relationship between the visible action and its consequences. From such point of view, personal achievements of a person come to those circumstances in which he finds himself. For the development of personality behavioral approach offers to create the appropriate conditions. However, ignoring the personal factor itself makes it inexplicable that in the same conditions, different people gain success in different degrees.

Z. Freud stated that the peculiarities of a man's personal development are laid predominantly in childhood. In addition, each phase of the child's development is the result of resolving the conflict between the inner instinctive drives and external constraints of the social environment. Thus, a normal child development is the basis of full-scaled development of the individual in adulthood. Based on the practice of psychoanalysis, Erik Erikson described eight age periods of a person, each characterized by its own characteristics, objectives and conditions of its percolation. Transition to each following stage (period) occurs after solving the problems of the previous period, which is the key to a constructive, positive personality development.

Thus, within behaviorism a human is treated as a creature which only reacts to external stimuli; the psychoanalysis theory, considers him as a victim of biological forces and conflicts encountered in childhood. The above mentioned theories have much in common. They assume that there are some internal natural preconditions of personality development, which are disclosed in the course of a person's growing up. But in order for them to be implemented as efficiently as possible, a favorable external environment is required, first of all the relevant social environment.

Humanistic psychology also recognizes the influence of conflicts, instincts and external impacts on personality. But in contrast to previous approaches representatives of this trend reject the determining role of biological factors and circumstances. They argue that an individual, being an integral creature, is potentially endowed with the desire for perfection, development, finding meaning in life. A person can and should rise above his biological nature, over his past, over limitations determined by his surroundings. In contrast to the earlier prevailing opinions, the view of human nature, proposed by humanistic psychology, is optimistic. It follows from the recognition of the level of development exceeding the "norm" to which a really healthy person strives, realizing or actualizing his potential. Throughout life a man constantly makes a choice, and does it consciously and independently. So he builds his life and forms himself.

A fundamental role in the development of personality psychology was played by a humanistic theory of Maslow, Carl Rogers, W. Frankl. They speak

in their works about such important missions as of a personality as achievement of social recognition and maintenance of the internal status (self-esteem), the search for truth and meaning of life, the realization of the moral and ethical ideals of goodness and beauty, securing life-integrity and individuality of existence of a person, in-depth understanding of life and his place in it, the assessment of this achievements, which would correspond to the representation of the value of self and others.

The process of identity formation according to humanistic psychology is caused by common life expectations and attitudes, and, consequently, by motivation, which is the most significant in the system of motives. Maslow found that a person has an underlying setup of attitudes or behavior models. He can behave reactively, seeks to compensate deficient situation and is guided in such a case by needs of the deficit. If a person behaves actively and wants to achieve success in various fields of life, he is guided by needs of development.

G. Allport was one of the first to take up the study of these problems, considering personality development as a continuous and active process of formation, whereby an individual takes responsibility for the quality of his life. Maslow defines education as learning to grow, that is, in which direction to grow, what is good and what is bad, what is desirable and undesirable, what to choose and what not to choose [125, p. 178, 179]. An important role in education plays artistic perception, carried out by means of music, visual arts, dance, and rhythm. One should not view this part of education as embellishment or luxury. Art education can serve as a means of harmonious, all-round development of an individual.

C. Rogers makes the following observations about what education could be like in the future if we used the knowledge that we possess even today. There should be an atmosphere of trust in which curiosity, a natural desire to learn, would be maintained and reinforced, and learners would find joy in creativity and intellectual discoveries. Through this they will be inclined to learn through life. At the same time, learners and teachers should be free to participate in decision-making concerning all sides of the educational process, develop a sense of community, cooperation, mutual respect and mutual assistance. The school should be a place where pupils have an opportunity to form self-confidence, self-esteem and are increasingly open within themselves a source of values, the ability to achieve success in life.

Thus, psychologists-humanists have made a great contribution to the theory of personality development: firstly, the involvement into the sphere of scientific knowledge high manifestations of human spirit, hardly amenable to rational analysis and, secondly, introduction of psychological science to the participation in solving fundamental problems facing humanity related to the development

and improvement of man. At the same time they managed to avoid the extremes, when too much hope in reaching the heights of personal development was laid on the reconstruction of society (which is typical of Marxists), or on the moral self-improvement, which is typical of the religious worldview.

In this connection, the search for the meaning of life, of which W. Frankl wrote so much, is of great interest. This issue is very relevant to the present-day Ukraine. Moral crisis, of which they started talking before the economic crisis, is nothing but the feeling of a huge number of people meaninglessness of their lives. This is due to the absence of any real choice and the inability to find in it a positive sense due to the destruction of the old values and traditions, discrediting the new values and the lack of ideological culture that allows to come to the meaning of life by their unique way. How many tragedies could have been avoided if people were not so limited in their capabilities and could build their life wisely and sensibly, to assume responsibility for the realization of meaning of their lives.

Personality development has also been an object of great attention for Russian scientists who deeply and thoroughly analyzed this problem. Thus, S. Rubinstein sees an individual as a carrier of consciousness and, above all, the relationship to the world. And consciousness manifests itself to him as a person's ability to develop this relationship, i.e., to take a certain position [178, p. 102]. Such is, in his understanding, the fundamental function of the personality.

A great contribution to the study of personality development has made acmeology, which was created under the direction of B. Ananiev. It is a science studying phenomenology, patterns and mechanisms of this process at the stage of maturity of a person, especially when he reaches the highest level of development. The stage of a person's maturity and his peak, or acme as they call it, is a multi-dimensional human condition, which shows, to what extent he has established himself as a citizen, as a specialist in a particular area. In this case, the physical maturity of the person is closely associated with his mental maturity finding expression in a state of mind, feelings, will, and his abilities. It is never a static formation, but is rather distinguished by variability and volatility.

As a result of studies conducted by acmeologists, it was concluded that the features of a big society in which a person lives his life will inevitably leave their mark on his development as an individual, as a person and as a subject of activity. And just as strongly he is influenced by social microenvironment, which always in its own way accumulates and refracts the effects of a large society. However, the decisive role in the formation of a person, in forming his own unique personality, belongs to the person, to his inner world, especially when he comes to the time of his maturity. All outstanding people in all areas of activity were people with a rich and permanently working inner world, aimed at the implementation of the main cause of their life.

Thus, the development of an individual is an internal spiritual and practical activity of a subject, which results in changes of his inner world. The inner world is consciousness and self-consciousness of a personality directed both at objective reality and, at the same time, at attitudes towards it. Here all of its (personality's) expressions are integrated, and human experience is generalized and systemized, and the person's behavior is evaluated. B. Ananiev stressed that this world is constantly working and the measure of fundamentality, depth and tension of this work are indication of the spiritual wealth of a person's individuality. He wrote that the laws of its creation and functioning demand obligatory study because without this knowledge will not be a complete understanding of the subjective source in a human at its reflection of reality, his attitudes to it and behavior [5].

According to A. Bodalev, no matter how hard are the requirements of society in their content and form, a personality accepts and transforms them according to the level of development of consciousness, needs, values, abilities and character. Personality itself sets its own goals, chooses the path to achieve them and gets certain results [23].

An analysis of domestic and foreign psychological and educational literature suggests that in the forefront of studying personality come out two aspects of the problem: the basic components of personality and its development. As established by numerous studies of philosophers, psychologists and teachers, the development is the *result of the increasing complexity of human activity, during which he enters into new relationship for him, gains experience, forms the motivation, evaluations, relationships*. Personality and its qualities develop in activities. Outside activities and relations there is no development.

Thus, according to scientists, the development of personality has social determination. S. Rubinstein believes that mental traits of personality are simultaneously manifested and formed in behavior and activities. Renowned geneticist P. Rakytsky wrote that psychics is the most complex integrated system, which in its form and content is social, because it has been conditioned and developed by human society at human's active interaction with it. Any new quality of a person appears at first only in certain situations, which in training and education, one can intentionally create. Repeating over and over again, the new qualities are generalized, summarized (S. Rubinstein), are assimilated by personality, they are interiorized (P. Galperin, N. Talysyna), converted into the internal property of a person, his abilities, personality traits.

The problem of abilities has always been the focus of researchers. It was dealt with by such well-known psychologists as L. Vygotsky, A. Leontiev, V. Krutetskiy, B. Teplov, A. Petrovsky and others. Psycho-pedagogical studies dealt with such aspects of the problem as the nature of abilities, their structure, varieties, individual differences and their natural preconditions, diagnostics, etc.

In the study of the origin of abilities, there can be singled out two completely opposite approaches. The first one comes from the recognition of the natural conditioning of a person's individual psychological characteristics and established itself in science as functional genetic approach (V. Krutetskiy, B. Mikityuk, K. Platonov, V. Shadrikov, V. Schwartz et al.). These scientists believe that the habitat and education are only conditions under which is manifested what has been laid by nature. The other extreme position is that all people have equal opportunities for successful development of any activity, but their achievements are different.

In this regard, it is interesting to consider A. Leontiev's point of view that specific human abilities are not inherited, but are formed in the course of mastering the culture created by previous generations. However, in his opinion, a person's development is also influenced by natural inclinations, but they generally do not affect the quality of possible achievements of his spiritual growth, but are revealed in special, mainly dynamic features of [112, p. 15].

The famous Russian scientist Konstantin Platonov, who paid much attention to the study of this problem, singled out such psychological factors of personality development as heredity, environment, activity, upbringing, education and others. Dodonov has expressed an original approach to solving these problems, saying that the main components of psychological makeup of a person are orientation, abilities, character, and outlook.

Domestic psychology and pedagogy come from the theoretical proposition formulated by L. Vygotsky, of the leading role of education in relation to mental development. Relying on the current level of real development, training should always be somewhat ahead of it, to stimulate, to lead. In other words, the acquisition of knowledge should be organized to introduce new elements to the activity, to form new relationships and thereby ensure the development. Of course, the degree of outstripping is not unlimited, it is determined by the degree of maturation of the body, including the brain-structures, the composition of gained experience. Such training is referred to as developing, and its structure is mostly of "task" nature. This means that the content of the studied material is presented to a learner as a series of tasks.

The role of cognitive activity in the development of a person was viewed in the works of such scientists as I. Zyazyun, R. Gurevich, V. Kremen, V. Lozovaya, P. Luzan, N. Nichkalo, S. Sysoeva, et al. They emphasize that the speed and ease of assimilation of knowledge and skills in any form of activity as well as its success depend on the development of cognitive abilities. Therefore, the task of training and education consists in just creating favorable conditions for the formation and development of individual abilities and creativity of an individual.

### ***1.5.2. All-round development of the student's personality as a necessary condition of his establishment as a professional***

In the second half of the twentieth century, special attention of domestic and foreign psychology and pedagogy was to study the development of the personality in the course of professional training and education. An important role in this process is the period of study at a higher education institution. Different approaches to the study of this problem are well represented in the writings of such scientists as I. Beh, B. Ananiev, E. Zeer, E. Klimov, A. Petrovsky, V. Lozovaya, and other authors. In their work the following directions of students' professional development are represented:

- development of professional directedness and necessary abilities;
- formation of psychological readiness for professional activity;
- management of mental states and processes;
- work out of life position and specification of life plans;
- increasing the level of independence and responsibility;
- increase of claims level in the professional activities;
- increase of initiative and creativity;
- ethical, aesthetic and spiritual development;
- self-education and the formation of the qualities necessary for success.

It is known that the impact of education on the personal development of students is very high. However, this potential may remain unused unless there is a special pedagogic content to ensure its implementation. So today's pedagogical practice requires a modern concept of education as a foundation to enhance this effect. It is necessary to understand the ideas and experience of leading scientists in the framework of the new pedagogical thinking.

Personal-professional development of students at higher education establishment directly depends on those meanings and values that they find in their professional activities. The tasks of educational and professional activities should not only be understood, but also intrinsically accepted. Ukrainian scientist Beh states that it is extremely important for a student in the early stages of his establishment and understanding his value space is the ability to see its relation to the objectives and tasks of the chosen profession, and engaging in a specially organized work on the development of his semantic guidelines [19, p. 110].

*By profession is usually understood a limited (due to the division of labor), scope of application of physical and mental powers of person, which enables development and expression. The term "profession" also means an occupation, speciality related to the use of special knowledge and skills.* I. Bech points out that the human desire to realize himself through profession is one of his major cultural values. Therefore, strengthening and support of this aspiration will be



the main task of professional education. The author offers a program of formation of students' value attitude to the future profession, which contains such items as acquaintance with the future professional activity and establishment of conscious knowledge of it, forming a real image of a professional in the chosen field, creating a professional image of self. At the same time, in his opinion, it is necessary to keep changing the image of present-*I*, in the direction of the image of future-*I*.

In the course of professional training, particular attention should be paid to enhancing students' desire for self-knowledge. Becoming aware of one's qualities, abilities, possibilities of development contributes to meaningful filling of learning activities and enrichment of semantic relationships. Through self-knowledge a student begins to orientate in the value-semantic content of his activities. Availability and realizing of important goal, idea, meaning, that is a meaningful component of professional directivity, is an important condition for professional and personal development of the student.

They provide the internal integrity of personality, determine a comparatively stable attitude to oneself, to others, to the profession and to the world at large. Value-and-meaning formations are the most notable regulators of a person's life and, including professional ones. "The values of objects, phenomena and their meaning for a person are what determines his behavior" [6, p. 93]. It is a long and varied the process, which involves a conscious search for personally significant meanings of professional activity and a person's choice of his way in life.

Establishment of a student as a highly qualified specialist at a university is only possible if there has been generated a motivational-value attitude to his profession. In this connection it is of interest an attempt of E. Zeer to identify types of students according to their professional directedness:

Type I – students with a positive professional orientation, which is a match of personality with a chosen profession, that suggests a link between its dominant motifs and content of professional activity;

Type II – students who are undecided in their choice of profession. They are characterized by a compromise between the undecided attitude to the profession and continuing their education at a university with a perspective of further work in their specialty;

Type III – students with a negative attitude to their profession. The motivation of their choice is due to the social value of higher education. They have got only a slight idea of the profession. Here the leading motif expresses the need in not so much the activity itself as in different circumstances associated with it [67].

Therefore, the students are different in levels of their interest in future career. It generally affects the efficiency of their learning-and-cognitive activity and the overall level of professional training. Preparation for professional work assumes the formation and development of value-conceptual components of the directedness, development and restructuring of students' motives. This is an important task of the period of study at higher education institution as of central stage of the personality formation. B. Ananiev draws attention to the "intensive transformation" at the student age of the entire system of value orientations of the individual and the formation of value-and-meaning components of professional orientation [6].

The purpose of training and education is to help a future specialist to find a place in life, to see the intrinsic value, its purpose, to stimulate the desire for self-improvement. This is facilitated by emotional acceptance of the chosen profession that brings a deep sense of satisfaction and makes a sense and happiness of his life. The attitude of students to the profession depends on various strategies, technologies, methods of teaching, as well as social factors. Creating favorable pedagogic conditions in the learning process encourages constant personal growth of students, which is particularly relevant in the higher technical educational institutions.

There is currently a crisis of Engineering Education, which is shown to reduce young people's interest in technology in general and their aim to get the engineering profession. This is due to the intensification of contradictions between the rapid growth of scientific and technical knowledge, development and widespread use of high technology, on the one hand, and the conservatism of the educational system, on the other. The crisis of the engineering education has also affected students' understanding of life values and objectives and contributed to the need to revise the content of education in accordance with the new requirements and the needs of modern society [159, p. 84].

The need for changes in modern educational theory and practice is emphasized by V. Kremen. In his view, "a necessary didactic condition is ensuring of such factors as the content of education, educational technology applied, the organization of educational space, emotional and psychological state of the pupil and student and the student's and the personality of the teacher and educator. The content of education should establish a clear system of knowledge and skills, acquisition of which is stipulated by the education objectives" [102, p. 5].

The leading idea of modern education is expressed in an attempt to link the resulting component of education to the planned changes of the personality development. For example, in teaching practice a so called competency approach, has actualized, in which it is suggested that a learner should be getting not

an education in general, but achieve a certain level of competence in the ways of life in human society. The main result of education is preparedness of trainees for unassisted problem solving in various fields of activities, as well as their ability to competently solve tasks in situations that require creative approach.

An attempt at typologizing the concept of "professional competence", defining its relation to other concepts was made by A. Markova. In her opinion, competence is an individual characteristic of the degree of compliance with the requirements of profession, such as a confident mastery of the skills, ability and proficiency to confidently perform work functions [124]. The author identified four types of competence: special, social, personal, and individual. Development of competence is a process that is not interrupted during the whole life of a person, as new, more complex problems that require new approaches to their solution get into the sphere of his activities.

Development of competence includes the acquisition of specialized knowledge, specific skills and abilities, as well as ways of thinking, understanding of the responsibility for their actions. S. Sysoeva emphasizes that the problem of formation of the individual competence significantly changes the role and place of the teacher in this process – from the translation of knowledge and methods of activities to the design of individual trajectory of the intellectual and personal development of the students. This idea finds its extensive use in the development of educational technologies directed at their creative development: the method of project, pedagogy of cooperation, individual and differential approach to learning.

For the formation of professional competence academic level of training is very important. Knowledge is a condition of the student's thinking and the basis of his development. Thus, P. Blonsky pointed out that reasonable activity may be carried out only on the basis of knowledge and experience [20, pp. 470, 487]. However, knowledge acquired as a result of learning is not always indicative of the positive changes in mental development. Often, students memorize mechanically complete set of facts, concepts, laws, without realizing it. Negative trends in the development and use of knowledge are seen, when the prevailing method of teaching is based on standard actions, an uncritical approach to the methodology of scientific discipline, a formal assimilation of not always complete and sufficient information.

From the perspective of modern education, not so much knowledge in itself is important, as the ability to operate them during the solution of theoretical and practical problems. Psychologists and educators claim that for a successful professional training both the accumulation of knowledge and mastery of intellectual techniques through which occurs acquisition of knowledge and manipulation of them is of great importance. Assimilation of knowledge can be

considered valid if it involves the development of the method and the availability of skills to accomplish it. In didactics today much attention is paid both to education as ways of doing things, and the creation of the necessary skills to do so.

The acquisition of knowledge and skills to use them are two main parts of pedagogical interaction, which merge into a single entity in the learning process. Vocational training should be considered successful when knowledge becomes beliefs, their volume – erudition and skills – a habit. This should develop activity, independence, responsibility, creativity, and other skills needed for a professional.

In connection with the modern requirements for future specialists it is necessary to develop a model of professional work, which includes the types of activities and the amount of required knowledge, the types and level of development of abilities and skills, providing opportunities for professionals to perform their work functions and to solve typical job tasks successfully. Such a model will provide the opportunity for rational choice of profession, science-based content of vocational education, training and personal growth, and the successful fulfillment of the functions of a specialist in this activity [160].

The World Congress of Engineering Education in 1992 has formulated the following requirements to an engineering college graduate:

- professional competence (the unity of theoretical and practical knowledge of graduates, their ability to carry out all kinds of professional activities, which are determined by the educational standards in the direction or specialty);
- communicative readiness (possession of literary and business written and oral conversational speech in their native language, the possession of at least one of the most common foreign languages in the world, the ability to develop technical documentation and use it, the ability to use computers and other communication and information means, including telecommunications networks, knowledge of psychology and ethics of communication, skills in management of a professional group or collective);
- developed capacity for creative solutions of professional tasks, the ability to navigate in non-standard conditions and situations, to analyze problems, situations, tasks, as well as to develop a plan of actions; preparedness for implementation of the plan, the ability to be responsible for its implementation;
- permanent, conscious, positive attitude to the job aspiration for sustainable personal and professional development;
- knowledge of methods of technical and economic analysis of production with a view to streamlining and optimization, as well as methods to ensure the ecological production and environmental protection;

- understanding the trends and guidelines for the development of science and technology.

Thus, in the process of student's learning at a higher education establishments, one of the main activities is an educational-and professional one, which is the main way of acquiring knowledge. At the same time it serves as necessary condition for personal development, when life experience is obtained, the surrounding reality and the place of the person in it is known, knowledge is acquired, skills and abilities are developed, mental processes that form the intellectual, emotional and volitional qualities of personality and his abilities and character are formed.

From the standpoint of a personality-centered learning, the content of education is defined as the content of the process of progressive change of peculiarities and qualities of the individuality. Insisting on the appropriateness of such a treatment of this notion, S. Podmazin states that the content of the educational process is the dynamics of its qualities and conditions. Indeed, if the goal of the educational process and the result is a person, the content of this process should be the formation of the individuality as a subject of activity and social relations, its intellectual, spiritual and physical development. [158, p. 50].

Thus, professional development is inseparable from the personal one. The basis of their integrity is the inner world of the individual, its unity. Comprehensive development of the future expert as a person is a necessary condition for his establishment as a professional. It should include the development of intellect, the favorable state of the emotional sphere, positive attitude to the world and to others, forming of self-confidence and independence, the development of achievement motivation, etc. Therefore, the object of professional development should be integrated personality characteristics: competence, personality traits, emotional and behavioral flexibility, communication, etc. Each of them is a combination of significant personal qualities necessary for success in life and work.

V. Shadrikov developed the concept of "integrative ensemble" of qualities, which affects the efficiency and effectiveness of labor activity. Each profession has its own set of characteristics which in foreign literature are known as the "key qualifications" [213, p. 109]. In their works E. Zeer, E. Klimov and other authors call them communicative responsibility, independence, initiative, activity, reflection, and the ability to self-development and co-operation, etc. In the psychological- educational research intellectual qualities are considered in close relation with other personality traits, especially volitional and emotional, as the actual process of thinking is associated with all aspects of the psyche of the individual. It is therefore considered necessary to aggregate formation of mental, emotional and volitional qualities of the individual.

N. Bordovskaya and A. Rean emphasize that the period of training at a higher education institution coincides with the formation of students' maturity and is characterized by the emergence and formation of the personality peculiarities such as focus, determination, perseverance, independence, initiative. At this time, there is a growing interest in the moral side of human life, the socio-moral aspects of the motives of conduct and self-control are formed. [26, p. 82].

Student period, as well as any other stage of the human life cycle, has a unique peculiarity. Back in his time K. Ushinskiy considered the period from 16 to 22–23 years as being "decisive", pointing out that it is at this time that the directedness in the way of human thinking and his character are determined [205]. According to B. Ananiev, who made a great contribution to the study of college students, "reconsideration of motivation, the whole system of value orientations on the one hand, and intensive formation of special abilities in connection with the professionalization on the other hand, isolated this period as the central during the formation of character and intelligence" [6]. Such a point of view was also expressed by L. Myelnik, who points out that the period of 18 to 25 years is one of the most sensitive periods, which is characterized by a high degree of perception of the social and professional experience, a high level of memory, attention, thinking [128].

Individual psychological characteristics of the student personality characterize its abilities or its potential. The task of education system is to create pedagogical conditions for its disclosure and development. Despite the large amount of research in this area there is still ambiguity in scientists' opinion as to what a person's potential is. Disclosure of the concept, its structure is necessary for the development of the conceptual basis of its formation and development.

Many scholars have traditionally viewed potential as a person's undiscovered opportunities, the reserve in achieving a goal, as an internal focus. Broadly speaking, the potential has the power to manifest itself in certain circumstances. V. Markov, and V. Siniagin determined a person's potential as a system of his renewable resources, which are manifested in the activities aimed at generating socially significant results. And they isolated the following points: Firstly, a person's potential is a resource index which in this connection should have a numerical index, and secondly, this resource is not a fixed figure but is continuously renewed through life. Thirdly, it is realized in the relationships with the environment, and fourthly, to the human potential a systemic quality inherent [123].

Analysis of the psychological and educational literature suggests that *the potential of an individual should be considered as a system of his renewable resources, the realization of which in the course of life leads to definite considerable from the point of view of the individual and society, significant*

*personal achievements*. It is interesting to clarify the question of how the individual psychological characteristics of a personality become an effective means to realize the potential formation and activity of a student.

Under present conditions, when the role of the subject factor in the development of society is greatly increasing, the formation of personality's activity is one of the most urgent problems in educational theory and practice of higher education institutions. Educational-and-cognitive activity determines the intensity and nature of training, because without a certain level of activity of a person it's impossible to achieve even the simplest act of cognition. Its formation is closely linked to forming a student's self-education, awareness of the goals and opportunities, initiative, development of skills of self-knowledge and self-regulation, willpower and other traits that promote this process.

The problem of determination of the activity is a matter of deep pedagogical research. A significant contribution to the study of this problem has been made by such scientists as D. Bogoyavlenskaya, A. Petrovsky, S. Rubinstein, G. Kostyuk, V. Lozovaya, S. Smirnov and others. Activity in research is almost always associated with functioning. Thus, S. Ozhegov does not give in his dictionary a definition of the word "activity", but explains the word "active" as functioning, energetic, operating, developed. Psychologists mean by activity the intensity of a person's orientation on a specific activity that is most clearly manifested in the character of its performance.

S. Rubinstein, emphasizing the difference between the activity and functioning, or action, said: "Of any mental process of perception, thought, or others, we say that it establishes the unity of content and process, and emphasizes its active nature. In this way, thinking as a process is for an activity, and not functioning. Of activities and actions in specific, critical values of the words we speak only where there is an influence, a change of environment." [178, p. 49]. As rightly pointed out by V. Lozovaya, between the activity and the action in which the activity is formed, there develops and exists a dialectical relationship [115].

Ukrainian didactist S. Goncharenko defines the pupils' activity in the learning process as a didactic principle requiring from the teacher the organization of the learning process in a way that helps to develop pupils' initiative and self-reliance, a lasting and profound assimilation of knowledge, development the necessary skills, observation, thinking and language, memory, imagination and creativity [38, p. 21]. This definition clearly focuses teachers on optimal use of teaching methods and techniques to obtain significant results of their work.

According to P. Luzan educational-cognitive activity, first of all, is formed and manifested in learning and cognitive work and is a qualitative characteristic.

Secondly, it is characterized by a special mental state, which can transform into certain mental structures and acquired qualities of the individual. Thirdly, specific manifestations of activity have a quantitative and qualitative expression [119]. This approach makes it possible to present the development of the activity as a structure, to identify the different levels of its formation, to give guidelines for teachers to enhance learning and cognitive activity.

Basing on the analysis of scientific research of activity, it is possible to define it this way: *the learning-and-cognitive activity is a multi-level integral formation of personality, which is characterized by a regulated mental state of a subject in the process of learning and is manifested in the results and attitude to learning-and-cognitive activity.* It is dynamic in character and can evolve from lower levels to higher levels. Summarizing the results of research of the problem of learning-and-cognitive activity's activation, V. Lozovaya rightly points out:

1. The main objective of activation is the improvement of the quality of the teaching-and-upbringing, which is achieved through formation of pupils' activity and self-dependency.

2. The process of forming activity itself requires a certain joint work of pupils and teachers.

3. Activation of cognitive activity requires the use of different methods, techniques, forms of learning that encourage an individual to play an active role. This requires such organization of the learning process, in which the object of training would be included in the scope of the pupil's activity, and which would create the conditions for their dialectical unity." [115, p. 38]. We should speak about the optimal choice of methods, techniques, forms, and techniques in the teaching process.

Methods are often some kind of external influence, which should contribute to the development of the whole person. Natural conditions and mechanisms of the person, leading to such a development, are often overlooked as a matter of course. However, it is consideration of these features and patterns that determines the effectiveness of the method. In other words, while developing specific methods aimed at human development, it is necessary to understand what their purpose is and basing on which psychological processes they work.

E. Ilyin believes that teaching methods stimulate cognitive activity of students in the group, stimulate interest, promote the establishment of an atmosphere of collective search, excitement, tension, affirmative emotions, allow the teacher to present the course material from different points of view, strengthening and stimulating the influence on cognitive demand [75, p. 61]. The main reasons for the choice of teaching methods, V. Lozovaya and G. Trotsko call their correspondence to specific academic subject, content within the selected form of training, and to features of this particular group of students [115, p. 329, 330].



Thus, according to L. Kulikova, a turn to reflection – not as to a procedure, but as a deep perceiving of the comprehended subject, of one's attitude to it calls the awakening of intuition, and of corresponding movements of the person's mind. His life activity's "nerve" comes to life, removing the inner lethargy, apathy, indifference towards the subject, the process of the study, and the participants of this process, including himself. Only in reflection as the internal state of self-perception within reality can be raised and strengthened self-dependence as a deep state of mind and the quality of the individual, as the nature of the person's self-organization [108].

Speaking about the pace of development of the individuality in the learning process, one should analyze the structure of the process of teaching and learning. The structural elements of the learning activities are somewhat modified, depending on the character of the educational problems being solved, of the leading methods of teaching, which in this case are used. But in any case, the structure of students' learning activity with the direct management of it on the part of the teacher is fully in line with the structure of their actions. The teacher plans the problems to solving of which students' efforts must be directed, stimulates them, while students accept these tasks and carry out the planned activities, based on the motifs that occur under the influence of stimulating actions of a teacher.

It is in this line of corresponding action is the unity of learning and education, which creates such a holistic phenomenon as pedagogic cooperation of the teacher with students. *It is a system of organic socio-psychological interaction, the content of which is the exchange of information, knowledge of one another, the organization and stimulation of the activities of students, creating conditions for the realization of their potential.* Optimal educational partnership creates favorable conditions for the development of students' motivation, their personal growth, provides a comfortable moral and psychological climate in the collective. It relieves the students' negative emotional tension, can cause the joy of communication, the desire to work together.

*Style of cooperation is a set of specific techniques and methods that the teacher implements in his activity on the basis of personal knowledge, professional experience, skills and abilities.* It provides maximum utilization in the teaching process of personal and vocational potential of the teacher. However, his authority is formed at a sufficiently high level of knowledge of the subject matter, students, of himself, and the ability to adjust his behavior. The culture of pedagogic communication includes the skills of listening, asking questions, analyzing answers, providing explanations, expressing his attitude to the subject, to understand the other person, to establish a cooperative relationships.

Successful learning at a higher education establishment increases a young person's faith in himself and his abilities, holds the promise of achieving the success in future career and life. In such conditions, there are more opportunities for personal growth and realization of his potential. The lack of success of a student in learning-and-cognitive activity complicates adequate self-realization, because the feelings associated with it, distract the person from constructive activities, do not contribute to his activity.

Traditionally, the concept of "*realization of personal potential*" is understood as *a process of disclosure of students' abilities, qualities, needs, ideals, values, and interests, aimed at achieving the desired result*. Implementation of abilities becomes a person's creative self-expression, the result of which is the creation of spiritual or material values. The need for self-realization of the student appears only when it firmly dominates the system of needs, and its satisfaction is aimed at creative socially meaningful activities. An important role in this process is played by professional self-determination.

In connection with this interesting are the results of a study conducted by N. Bordovskaya and A. Rean which allowed to distinguish the following groups of students:

- the first group – the students, oriented to education as a value and to the professional activities (45 % of respondents);
- the second group – the students focused on business who do not show an interest in research as the basis of content of the profession and see the education as tool and a way to create their business in future (32 % of respondents);
- the third group – the students for whom the problem of professional self-determination has not yet been solved (23 %) [26].

One of the main factors that hinder the realization of students' personal potential is the lack of ability to self-knowledge and understanding of themselves, their skills and capabilities. Without this neither occupational nor personal formation nor development is possible. One should also be consciously and emotionally keen in his chosen profession, which brings great satisfaction and requires great effort and constant work on oneself for self-realization in a particular area.

During an experiment at a technical university expert assessments were used to establish the subjective factors that adversely affect the personal development of students and their preparedness for professional activities. The results of the study are as follows:

- inability to control themselves, their thoughts, feelings and behavior of the (67 % of respondents);
- lack of well-established and formed life values (69 % of respondents);

- uncertainty of personal life plans (63 %);
- a halt in self-development and self-improvement, lack of motivation of training (58 %);
- lack of problem-solving skills (69 % of respondents);
- uncreative approach to work (59 %);
- lack of skills and abilities to influence people and convince them (72 % of respondents);
- low level of development of communication skills and the quality of leadership (62 %);
- a low level of social competence (59 %) [74, p. 133].

The survey showed that most students consider their personal potential not disclosed. This conclusion is confirmed by the following data: only 5 % of respondents believe that their potential was open by more than 45 %, 29 % – by 20–34 %, and 30 % of respondents believe that their capacity is disclosed less than by 20 % [74, p. 135]. These data indicate that the reason for the lack of self-realization, according to students, is lack of favorable conditions during training for the disclosure of their potential. Nevertheless, it is possible to talk about the realization of students' individual potential during training conditionally, as for the most part only its discovery and development occurs.

According to A. Petrovsky, in the process of development the personality goes through three phases of formation: adaptation, personalization and integration [154]. During the first of these the development of existing values and norms takes place, and the next phase is characterized by the desire of the individual to maximize personalization, while during the third one the person tends to show his qualities in society. These processes can be realized in both positive and negative ways. In the latter case, it will be the phases of disadaptation, disindividualization, and disintegration. In accordance with this concept, self-identity can be represented as the process of entering a new social space and the process of integration into it.

The student while studying at a higher education establishment has great opportunities for self-identification and self-understanding, for awareness, and changing their self-concept, development and self-improvement. Correction of his ego (his *I*) in a positive direction helps him overcome internal barriers and fosters his personal growth as well as future successful integration into society. Integration into the social space may fail for various reasons, and as a result a person cannot fully realize his potential. Internal personality traits remain as the main qualities that cause him to develop new strategies to adapt to the society, and then integrate into new conditions of life both in cognitive and the emotional aspects.

Studying at the university is a favorable time for the formation of the qualities of a successful professional. So a lot of attention in the process of learning should be paid to the problem of forming a student oriented at successful professional career. Based on the results of theoretical analysis of this problem, and the results of studies by different authors, it's possible to conclude that a successful person is characterized by:

1. Professional maturity, notably:

- a high level of professional knowledge and skills;
- the existence of interest in activities, the search of personal meaning in it;
- professional and personal traits;
- creativity;
- communicative competence;
- the ability to self-knowledge and self-improvement.

2. Active lifestyle, which includes:

- striving for self-realization;
- control of one's thoughts, emotions, behavior;
- the main goal in life, the knowledge of strategy and tactics of its defining and achievement;

• a high level of motivation to succeed.

3. The high degree of reflection:

- knowledge of self, self-control;
- self-programming for success;
- adequate positive self-esteem and positive thinking;
- self-confirmation by self-persuasion;
- a sense of optimism and confidence.

4. Self-realization (in this case the result is evaluated as a success)

- the personality (subjective experience as a result of the first significant action);
- reference group (recognition of the success by people whose opinion for the person is significant);
- objective data or indicators of success.

Ukrainian academician I. Zyazyun states that a student can succeed in his profession, if in the process of learning there have been established pedagogical conditions necessary for the transformation of learning and cognitive activity into a professional one. To achieve the objectives of effective specialist's personality formation at a higher education establishment training is needed which ensures the transition, the transformation of one type of activity (cognitive) to the other (professional) with a corresponding change in the needs, motivations, goals, actions, methods, objects, and results [69, p. 74].

### ***1.5.3. The methods to form future professionals preparedness for activities***

Students' obtaining educational information or their having formed behavioral skills within a variety of academic disciplines does not guarantee their complete mastery of professional activities. As a result, in order to become a competent, a higher education establishment graduate has to go through an extended period of adaptation – both professional and social – which often takes several years. To become theoretically and practically competent, a student must make a transition in his minds from the information to the idea, and from there – to an act and deed. Only in this case the information becomes meaningful knowledge. In other words, for knowledge to become the professional one, the information from the beginning must be assimilate by the student in the context of his own practical action and deed, his personal practice and conduct.

The context, as A. Verbitsky states, plays a crucial role in all processes of the psyche, consciousness and activity. *Context is a system of internal and external conditions of a person's behavior and activities that affects the perception, understanding and transformation by the subject of the specific situation, giving meaning and significance of this situation as a whole and its components as well* [30]. Accordingly, the inner context is individually-psychological features, knowledge and experience of the person, while the external context is subject, socio-cultural, spatial and temporal characteristics and other situations in which he acts.

Understanding the semantic-forming impact on subject and social contexts of the student's future professional activity on the process and the results of training activities has become one of the foundations of the theory and techniques of contextual training. Another such foundation is a theoretical generalization of diverse experience in the use of forms and methods of the so-called active learning. The third and main one is the activity-based learning theory, which has been widely developed in the national psychology [31].

Traditional forms of organization of students' training activities do not look like their real form in the professional sphere. Meanwhile, according to one of the main provisions of activity theory in order to master a particular activity, one needs to implement it in an environment specific to the subject or phenomenon in systems that they form [112]. This is the main contradiction of professional education: the mastery of professional activity but should be ensured within and by means of qualitatively different learning activity. They have the same psychological structure, but its substantive content is different (see Table 1.4):

Understanding the experience of active learning in the framework of activity theory with the support mechanisms for the semantic contexts has led

to the development of theory and technology of contextual learning. Contextual learning theory provides an answer to the question of how to resolve the contradiction between the content, forms, and conditions of student's learning activity and the integral activity of a specialist being assimilated by him.

Table 1.4 – Information content and structure of the training and professional activity [31, c. 54]

Activity structure	Training activity	Professional activity
Need	Training	Labor
Motif	Obtaining of new, professional implementation	Realization of intellectual and spiritual, self-development of the person
Purpose	Common and Professional personality's development	Producing of material and spiritual values
Actions, work, operations	Cognitive, intellectual	Practical, also theoretical-practical
Meanings	Psychical of reality rejections	Transformation of reality
Subject	Training information as sign system	Substance of nature Unknown , mentality and personality etc.
Result	Active abilities of a man, System of relations to piece, other people, to himself	Goods, new knowledge, people's education, self-realization of the personality

We need to create pedagogical conditions for the dynamic movement of the student's activity from training to professional, transformation of the first into second with a corresponding change of the needs and motivations, goals, actions (deeds), means, objects, and results. To do this it is enough to model in the forms of students' activity the content of specialists' professional activities on the part of its product-and-technology (Object context) and social components (social context).

The basic principles of contextual learning are:

- pedagogical principle of personal involvement of a student in educational activity;
- consistent modeling in the learning activities of holistic content, forms and conditions of professional roles;
- bringing problem content into training and disclosure of it in the educational process;
- the adequacy of the forms of organization of learning activities of students to the purposes and content of education;
- leading role of joint activities, interpersonal interaction and dialogic communication of subjects of the educational process (teachers and students, between students themselves);
- pedagogically-based combination of traditional and new pedagogic technologies;
- unity of teaching and professional education of the individual [31, p. 57].

Educational technologies of contextual learning are designed departing from these above principles, learning objectives, content of the program material, the conditions in which the educational process takes place, contingents of students, their areas of training, of individual preferences of the teacher. Development and implementation of a set of specific technologies of contextual learning, relying on its basic principles is the realm of pedagogical creativity of the teacher.

As a material for such a complex can serve both all known forms of teaching methods – innovative, programmable, traditional, etc, and those created by a developer himself. In the contextual training, one can use any forms and methods of training procedures. It is only important to stick to the principles outlined above, first of all, the principle of adequacy of the forms of organization of learning activities of students to the purposes and content of their education.

Thus, the development of the content of the social experience is maintained not through the transfer of information, but in the process of personality's activity directed at objects and phenomena of the world. From these positions the goal of the student is not in the assimilation of knowledge, skills and abilities (this is necessary, but not sufficient), but in his willingness to master the complete occupational activity of a specialist. The process of formation of readiness of future engineers to the profession while studying at the university is influenced by many objective didactic factors: organizational and pedagogical influence, structure, content and amount of material, motivation, timing and methods of teaching, etc. This process requires the creation of favorable conditions for the development of pedagogical and development of subjective qualities and characteristics of the individual student.

S. Maksimenko believes that *the willingness to work is the mobilization of the states of psychological and psycho-physiological systems of the human, which ensure its successful implementation*. The scientist identifies several aspects of the preparedness activities: a) operational – owning a complete set of modes of action, knowledge and skills, as well as the possibility of new experiences in the activities; b) motivational – the quality system to encourage the implementation of activities (motives of knowledge, achievement, self-actualization, etc.); c) social and psychological – the maturity level of the communicative sphere of personality, ability to organize work, staff, and maintain a sound relationship in the collectivized avoid destructive conflicts, etc.; d) psycho physiological – ability to utilize capacities of body system. Each state is defined by the union of different factors, which correspond to different levels of training. Depending on the content of the activities performed and the conditions for its performance, any of those aspects may become a leading one.

In the writings of other scholars *preparedness for activity is defined as a holistic psychological formation in which integrated knowledge and skills of a person are absorbed in accordance with the kind of activity executed by him*. According to B. Ananiev, it cannot be limited to characteristics of skill, labor productivity, its qualities are manifested at a time when corresponding actions are performed. Important in assessing the level of training he believes the determination of internal strengths of a personality necessary for a successful career in the future.

### **Questions for self-control and verification**

1. What are the main directions of the study of personality development.
2. What is the concept of "personality" and its development?
3. Define the concept of "professional competence."
4. What is the essence of the competence-based approach?
5. What are the current requirements to a specialist?
6. What are the integral characteristics of individuality?
7. Give the definition of "potential of a person".
8. Describe the psychological profile of a successful person.
9. Name the factors negatively affecting personality development.
10. What is the monitoring of the study of personality development?
11. What is the content auto-psychological competence?
12. What is the technology of a "portfolio"?
13. What are the advantages of using the method of "portfolio" in the independent work of students?
14. What is a module-rating system and what are the benefits of using it?



## **1.6. Self-development of the student's personality and his self-education**

### **1.6.1. Personal self-development and main directions of its study**

*Self-development is a targeted multifaceted personality self-transformation, which serves the purpose of its highest spiritual and ethical and practical activity – self-enrichment and self-disclosure, it is independent formation of it, aimed at a successful self-realization in society.*

In the context of the philosophical understanding human self-development is the core of the process of his formation. First of all, it is a process that is biologically predetermined and provided with unique self-enhancing mechanisms for the deployment of human qualities. Secondly, this process, determined by the environment influences the development of the person, his upbringing, and the values, goals, will and personal qualities. The man is in a state of self-development throughout his life, since the first acts of self-regulation in early childhood to the conscious realization of self-transformation in adulthood. In adults, this process can take a different character – from the conscious, purposeful system of positive self-conscious to stagnation and regression changes, self-destruction.

Personal self-development is, in fact, the psychological mechanism of "man-formation", of establishment of an integral system, which manifests itself as a fundamental contradiction between the actual and required levels of psychosocial maturity of the growing person. It is a driving force behind its development on the basis of self-knowledge, self-awareness, that actualizes value self-orientation, serves goal-setting and effective activities.

V. Ivanov, M. Kagan, L. Nikolov and others have drawn attention to the consistency, polystructure of human activity, as well as the presence in its structure of specific actions related to the change of its own "I". M. Kagan theoretically justifies its three main types: transformational, cognitive and value-orientation [77, p. 53]. At the same time, he highlights in the field of converting the type of activity in which it is directed by the individual onto himself, on his I with the aim of physical or spiritual self-improvement in cognitive sphere – for self-knowledge and a value-oriented self-evaluation. Consequently, self-development is aimed at changing the subject himself. This is an internal spiritual and practical human activity which results in changes of his inner world. These provisions are accepted by all researchers and are not questioned, but what remains unclear is the nature of the activity itself, its source.

In this connection is of interest the analysis of the structures of individual activities undertaken by Bulgarian researcher L. Nikolov. He identifies three main types of it: the first – the creation of the conditions, of the second – "delivering conditions" and the third – "self-satisfied manifestation of human

strength." The author emphasizes that it is the third type that is the basis of self-development and origin of all human activities. A person's ability to change his inner world is inseparable from his ability to create new external objects. Therefore, the qualitative characteristics of human activity are that it is able to change both the internal and external environment of the subject, to use the environment for internal changes and vice versa. [143, p. 87].

External determinants precede self-development of any system. When determining role in the development comes to internal determinants this process acts as self-development. We are talking about the formation of individuality as an integrated system, which is possible only in the unity of all its components (intellect, emotions, will, etc.) at a certain stage of human development. It involves the development of self-consciousness in the unity of self-knowledge, self-evaluation, self-control, self-regulation, self-forming and self-improvement.

Personality setting goals and discovering his unpreparedness to a greater or lesser extent for their implementation begins to work on self-development. Thus, it is constantly in the way of the mismatch between the actual and desired, so it has to operate and improve. Overcoming this mismatch, it is forced, if it strives to achieve, to constantly gain the desired level with renewed efforts of self-development.

Personal self-development is exclusively significant as a way of socialization. The more productively this process works, the more individuality understands itself and the surrounding reality, increases the ability to adapt to it, increases its activity. Purposefully expanding subjective experience of activity and communication, a person develops the skills to establish positive relations with other people, their understanding, as well as organizing activities, group interaction, etc. This manifests the dialectical relationship between self-development and socialization of man: successful socialization intensifies this process, but it manifests itself on the basis of his personal self-development.

Representatives of humanistic psychology are trying to determine the basis for the process of self-development or improvement of the individual. Scientists often use terms such as growth, autonomy, self-development, self-knowledge, self-actualization, self-realization, the meaning of which has not been clearly enough defined, but rather merely indicated. *And they often use the terms "self-realization" and "self-actualization" interchangeably, which are understood as continuous implementation of the potential, abilities and talents of a person as the accomplishment of his mission or calling, destiny, and the full knowledge and acceptance of his original nature, the relentless pursuit of unity, integration or internal synergy of personality* [125].

The concept of self-actualization got a deep development in the writings of A. Maslow by his studying a healthy, continuously developing personality.

He developed a concept based on empirical research and theoretical analysis of the results. The main emphasis was placed on the description of the person making decisions rationally and consciously seeking to actualize his potential. And this desire is, in the author's opinion, the apex of the pyramid of hierarchy of needs. The people he surveyed had already sufficiently satisfied their basic needs for security, belonging, love, respect and self-esteem and might be guided by the desire for self-actualization.

Maslow considered the development not only as a progressive satisfaction of basic needs up to their complete extinction, but also as a specific form of motivation of growth over them, for example, the development of talents, abilities, creative inclinations, of inherent potential. Therefore, he believed that the basic needs and self-actualization relate to each other as childhood and adolescence. One comes into the other and it is its prerequisite. In this case, the psychological life of an individual in many aspects proceeds differently. As one rises in the hierarchy of needs, he becomes increasingly free to choose the direction of personal growth and, following this, he necessarily not just changes, but develops as an individual, as a person, as a subject and as a professional. Disclosure of self-empowerment, of potential inherent in a person requires his maximum creative effort.

The driving forces behind the development of the individual are inherent contradictions between the ever-growing needs and opportunities to meet them. At a low level of development of their relationship is mainly conditioned by utilitarian, mercantile interests of the individual. The highest level of development is characterized by rich inner world of the individual, the presence of values and understanding of the meaning of life, the desire to realize their potential and achieve the best possible results in their lives.

Such persons are in a state of continuous development, self-improvement and self-realization, constantly opening up new horizons in the course of life, experiencing "the joy of tomorrow." In difficult conditions, they are tolerant, able for appropriate actions. They bring a highly developed sense of justice, conscience and honor. In building life plans a developed personality departs from real opportunities, avoids excessive claims. It is resolute and persistent in achieving important goals, but not rigid, and capable of correcting its behavior. With a strong sense of self-worth, the source of the identity of its successes and failures considers itself rather than external circumstances. Under extreme conditions, it is able to take responsibility for them and to take calculated risks.

A. Maslow says that 99 % of adults do not fully use their mental and physical potential [125, p. 45]. This limited use of self-empowerment (of their abilities) in his opinion is due to the fact that people are too busy to meet their basic needs for food and drink, at work and at home. Instead of actually living

they are preparing for life for a long time. The needs of higher level, especially early in their wake, are weak and easily slowed or changed as a result of fear, adverse circumstances and improper training. And although self-actualized personalities are a fraction of one percent of the people, A. Maslow highlights the lack of a clear, sharp boundary between them and ordinary people. He believes that in every man and definitely in every newborn child there is an active focus on health, the momentum of growth, to the actualization of human potential.

The study of people in whom the motivation of the individual prevails, the concept of "striving for peace" becomes completely useless. With such people meeting the needs increases, rather than decreases motivation, exacerbates rather than dulls the fun. Such a person, instead of looking for peace becomes more active. Disclosure of one's own abilities begins when a person feels a deeply satisfying process of personal development. Those who started to play sports after a long pause know nice it is to re-experience their physical capabilities. Thus, the disclosure of one's abilities is a natural process that begins when there is no significant physical or social opposition. For this it's also necessary to be aware of one's real needs and purpose in life.

A. Maslow treats the need for self-actualization as a person's desire to self-actualize, to become what he can be, do things for which he is intended. The mechanism of human self-actualization – the knowledge, testing and implementation of their personal capabilities – plays the main role in the motivational conditions of cultivation a creative person. In connection with this, in the author's opinion, it is necessary to create a favorable environment for freedom of expression, a space for creative activities, social comfort.

Many similarities with the self-actualizing person of A. Maslow can be found with the "fully functioning person" or "person of tomorrow", considered by Rogers. Thus A. Maslow focuses on mature individuals who successfully proved themselves in their professional activities, and their characterological features. C. Rogers is interested mostly in young people, who have already carried out their personal choice, who are critical of a social reality, of the prevailing norms and values.

To conclude viewing the traits of a healthy self-actualizing person, as it is understood in humanistic psychology, we present its characteristic given by D. Schulz on the basis of summarizing the works of many researchers, including the views of Carl Jung, Erich Fromm and the founder of Gestalt therapy F. Perls. He noted that despite there being many differences between these scientists, they all agree that a psychologically healthy person is usually in control of his life. He is capable of conscious (though not always rational) management of his behavior and disposition of his own destiny.

Psychologists who hold a humanistic approach were taken steps towards establishing an operational self-actualization. However, they pay a lot of attention to the application of their ideas in different areas of practice: psychotherapy, training, professional advice, management, etc. Giving preference to the "helping model", they believe that it is necessary to help the individual to self-actualization, and not to alter it.

In "The Psychology of Being" A. Maslow wrote: "In the theory of the formation of the individual there should be given a place to self-improvement and self-control, contemplation and meditation." In forming this view the important role is played by psychological experiments with meditating people. They showed that such people displayed a number of signs that A. Maslow believed characteristic of the self-realized personalities.

Personal self-development, according to national scientists, is also a measure of personality's maturity. A mature person is a person whose system of life's self-determination is morally justified, effective and dynamic, in which the behavior and activity are based on an internal locus of control and internal controls, who realizes full responsibility for his thoughts, feelings and actions. The dialectical relationship of the processes of self-development and growth of maturity is obvious.

Acmeology comprehensively studies the features of this condition in different people, as well as the effect of different factors that determine the individual picture of maturity. The state of maturity affects all previous human life, as well as his natural predisposition. This will determine what values and relationships form the core of his personality, as well as what skills, knowledge, and abilities are inherent to him.

In this connection it is interesting to find out the characteristics that have to be formed in a person's childhood, at school, in the years of adolescence and youth, so that he can successfully prove himself on the stage of maturity. Representatives of acmeology also analyze mastering by a person of his profession, reached the level of mastership. By the professionalism they understand vivid development of abilities, deep knowledge in their field of activity, as well as possession of non-standard skills. This is directly related to the strong and sustained motivational-emotional orientation toward the implementation of these activities and achievement of good results in it.

The scientists compared the psychological characteristics of people who were able to achieve outstanding results in their activities, and those whose personal achievements in work and life seem very modest. Thus, the characteristics of the cognitive sphere of people who have reached the acme of their development, is an active reflection of reality and the ability to navigate it well.

In the paintings of the world that they have thus formed there is imprinted all the most significant. These people demonstrate in their work the ability to find the optimal solution and the ability to implement it, which is manifested mainly in the area of their professional work. Relying on their experience, intelligence and feeling, they formulate for themselves a large-scale target. By displaying obsession in the exercising their capturing plan, they tend to focus their physical and mental strength to its execution, realizing their creative potential.

Thanks to the developed within such people social intelligence and sustainable pursuit of objectivity, the acceptance of self and others for what they are is inherent in them. They are characterized by spontaneity and sincerity in actions to express their thoughts and feelings, by open and honest behavior in all situations, by rejection of convention. Convinced of the importance not only for them but for other people of the results that will be obtained after the implementation of their plans they may be rigid with respect to their opponents and actively overcome their resistance. They tend to establish friendly relations with other people, which are not relegated to interests of business. They are not afraid to be unpopular and condemned for non-traditional views.

To sum up what has been said above about the people who deserved reaching great heights in their civil and professional growth, these people of sober intelligence and the same feelings, who are encouraged to implement their prospects in life with deeply assimilated universal values and who are able to realize their goals. And their large-scale goals are not abstract, but concrete. Of great importance in a person's reaching the top in his development, or acme, is to work on oneself, develop oneself as an individual, the person, the subject of activity, which means continuous revitalization of one's inner world.

Thus, personality's self-development is aimed at changing the person, as a result of which his inner world changes. The inner world of the individual is not the result of a mechanical implementation in mind of a variety of external actions. It is the result of the inner workings, during which the external, passing through the subjectivity of the individual, is processed, assimilated and used in practice. The system obtained in the process of learning and individual self-developed social skills manifests in subjective form (world view, values, interests, beliefs, orientation, etc.), reflecting his interaction with the outer world.

In connection with this scientists face the task of a comprehensive study of the laws and mechanisms of the inner world to make effective use of all its opportunities for self-development and self-identity. The solution to this problem is a very difficult thing, because in childhood, adolescence and youth individual variation in characteristics of young people is very high and therefore

requires a variety of psychological and pedagogical tools of correction methods which would lay the foundations for their movement to success and self-realization in their lives.

The process of self-development, in the opinion of A. Bodalev includes:

1) changes in the field of human motivation, which find their indispensable expression in universal values;

2) the increase in ability to plan and then implement at the level of intelligence and then in practice those actions which correspond to the spirit of these values;

3) the emergence of a greater ability to mobilize oneself to overcome the difficulties of an objective nature;

4) a more objective assessment of one's strengths and weaknesses and the degree of one's readiness to implement the designed objectives [21].

Each of these changes, meaning the development of a person's inner world are qualitative adjustment in mental processes and their relationships, the appearance of the characteristics that are beginning to have a positive impact on the process of gaining new personality traits. This process does not expand at the same pace and is accompanied by uneven development of structural elements. However, the development of some of these changes is a condition changing of others. For example, a persistent manifestation of achievement motivation makes a person more persistent in its efforts to implement the set goal and, thus, achieve success in business. The results, in turn, inspire the person and encourage him to solve more difficult problems. Psychological basis of this process is profound changes in consciousness and self-consciousness of a person.

Russian physiologist A. Ukhtomskii substantiated the general biological principle of dominance, which is the basis of directed activity of living systems at any level of the organization. The study of this principle explains and reveals the patterns of formation and development of personality. *A dominant is a constantly operating excitation source in the central nervous system, which gives the mental processes and human behavior a certain orientation and activity in this area.* A dominant knot can represent a functional formation in the personality structure that provides a persistent focus of attention, the filling of purposeful and system corresponding to that formation [204].

A dominant is a motivation, orientation, attitude, leading a person's need for individual realization of his orientation, being a potent agent of activity. It is a center where all the activities, behavior, human creativity are grouped. His vital function is a set of dominants that follow each other. They may be more or less strong, conscious or unconscious, situational and long-term. Thus,

the dominants are one of the most important mechanisms for self-development, such as the dominant of constant self-improvement, creativity and the search for truth.

A. Ukhtomskii not only claimed the opportunity and the need to create and manage dominant behavior and mental development, but also gave specific recommendations for their education and correction. For the efficient formation of the self-improvement dominant, these are the environment of human life, the style and methods of external influences, appropriate to the set goals. For the processes of self-improvement to become dominant in mental development in the learning process, it is necessary, according to G. Selevko, to organize the following conditions:

1. Awareness of individual goals, challenges and opportunities of development and self-development.

2. Participation of the individual in an independent and creative activity, a certain experience of success and achievements coaching.

3. Appropriate style and methods of external influence: the learning environment and style of life [183].

Creating the students' a dominant attitude-motivation for self-education, self-awareness of the need in self-improvement will help to solve many of today's problems of education. In the process of acquiring some experience and quality, personality begins at this basis to choose its own goals and means of action freely, to control its actions, at the same time improving and developing its abilities to implement it, to changing and educate itself. The main condition of forming a goal is a personal sense of the results sought by the person. Achieving the goal becomes the meaning of his life.

Thus, the self-development of a person is manifested in his achievement of new, qualitatively higher levels of productivity of both every separate mental process, and their interactions, resulting in the successful solution of ever more complex tasks. This self-development has always two interrelated aspects: external and internal. Internal position becomes the condition through which, according to S. Rubinstein, external influences are refracted. A clear vision of the goals and means of implementation, as well as the relevant person's motivation are necessarily accompanied with adequate self-control and self-regulation of the senses, motor skills, mental health, self-awareness as a whole.

However, such an understanding of the role of self-development in the formation of the individual does not diminish the role of training and education. Man develops not only by incorporated in him inherited program and under influence of the environment, but also depending on the shaped in his mind experience, abilities which are formed in the process of growing and learning.



Therefore, there becomes even more urgent the need for such a humanistic education, which in the sensitive period of personal development activates the mechanisms of self-knowledge, self-control and self-creating activities of the growing person, helping him to perceive and gradually deepen the relevant experience of life.

In the formation of such a person is laid the meaning of education of the XXI century that needs updating based on the latest educational theories and research developed by methodology. The solution to this problem is assigned to a modern pedagogy, based on studies of sciences, including physiology, human psychology, etc. It is then when education, updated within the meaning and essence, can and must become a "school of self-development" for young people.

### ***1.6.2. The role of higher education institution in self-development and self-education of the student's personality***

The objective function of training in higher education is the development and self-development of the individual student in the process of gaining knowledge on the totality of the system of scientific disciplines and its creative application in future careers and life practice. Within the university education system, the conditions for self-discovery and development potential of the student are created. One of the major tasks of higher education is the formation of the inner world of students, and this requires knowledge of the laws of nature and society, as well as himself, self-fulfillment, self-development and self-improvement.

To solve this problem there is developed the educational system, which continuously and purposefully develops mental abilities of students required for the learning process, and also the ability to self-knowledge, reflection, self-improvement. In different courses, this is done in different ways. At the younger years much effort is aimed at the diagnostics and implementation of student predisposition to a particular activity, the disclosure of his potential, the development of such abilities as desire to learn new knowledge, to conduct their own search for the sources of information, the ability to solve the tasks assigned to him, to be sure himself. At the undergraduate year it is necessary to create teaching conditions for the development of students' potential, the formation of high positive scores and their readiness for success and fulfillment. The dominant feature of this should be the idea of self-development and self-improvement.

The solution of these problems depends on the development level of the educational space, which is the environment of formation of students and teachers, and thus their self-development. "The educational process of higher

education, with all its realities, if it is set humanistically, becomes the new context of human development, giving it a variety of conditions for self-knowledge, is a constant source of increasing reflexivity" [5, c. 100]. This is due to the fact that in the course of its life, providing training, work, leisure, socializing people, the higher education institution sets the norms of relations, sets the system of requirements for their regulation, creates the conditions for the manifestation of personality traits. At the same time, there is a formation of the system of internal controls: beliefs, ideals, motivations, commitments, personality traits, self-evaluation, self-respect, self-confidence.

Education has an inherent potential of enhancing personal growth of students. It is a holistic system of formation of the inner world of students, their outlook, values and beliefs that enhance self-knowledge and self-development to ensure self-development of participants in the pedagogical process. Its content defines certain ideals of education for the student, many times within different academic disciplines, draws people to their growing understanding, evaluation, application in their own lives. The more methods of learning appeal to a person's self-consciousness, require the analysis and resolution of issues, the more intense the situation is reproduced, evoking questions, doubt, surprise – all the so-called "points of personal growth" of a person.

An important condition for a person's self-development is the relationship of cooperation of teachers and students, spiritual and ethical relationships that exist between them as support and solidarity. They can encourage to socially-oriented changes to the formation of necessary features and capabilities. An important role is played by the provision of educational assistance and support, the organization of pedagogical support for personal development and self-development, based on an integrated approach to solving the existing problems of the students. *Educational support for self-development of students at a higher education institution is a complex methodical maintenance of student-centered set of methods, techniques and adequate means to facilitate the realization of their potential in learning-and-cognitive activity.*

Today, however, in the educational space of a university there are no sufficient conditions for self-development. The reasons for this are:

- lack of understanding of the importance of the inner world of a man and his consciousness to form a fully developed student;
- lack of a clear study of the nature and methodological basis for the formation of self-consciousness and its structure;
- model of the educational institution does not meet the existing at this point technologies personality's self-identity;
- lack of understanding of the importance and necessity of the processes of self-development on the part of students;

- insufficient development of methods of teaching staff activities in teacher support;
- the material and technical equipment of the educational process is not conducive to adequately create the conditions for self-development of the student.

As the teaching experience and studies show, among the most important prerequisites for the effective self-development of students are these: the need and the motivations for their successful work on themselves, the capacity for reflection, adequate self-evaluation and a healthy sense of self-esteem, which does not allow to lag behind the others and to be successful, self-confidence.

Due to its high relevance and practical significance in teaching this problem has become the basis of research, the purpose of which was to examine the students' readiness for self-development. Under the willingness to self-development and self-improvement of the future specialist one should understand his awareness of the need for the fullest realization, development and use of their abilities and potential in practice. Students' readiness for self-development is seen as a comprehensive description, which includes a number of indicators:

- the ability to self-development;
- motivational value attitude of the student to self-development as an essential condition of the disclosure and use of all its capabilities;
- the ability to self-knowledge (reflection);
- self-evaluation;
- self-confidence and self-esteem;
- goal-directed behavior;
- self-monitoring and self-regulation;
- self-efficacy [134, p. 305].

The problem of confidence and lack of confidence in the person himself is the subject of attention not only from psychologists and therapists; it is quite relevant for teachers. The practices of psychotherapy in the study of uncertainty are the basis for a number of theoretical generalizations and creation of concepts of self-confidence as a complex characteristic of a person. It includes basic behavioral, emotional and cognitive characteristics of a confident man.

Rüdiger and Rita Ulrich by self-confidence refer to the ability of an individual to pursue their claims and demands in the course of interaction with the social environment and enforce them. Other authors have attempted to expand and elaborate this definition. According to them, confident people assess their environment adequately. They are more independent of external circumstances, as well as the thoughts and expectations of others.

Self-confidence helps a person to better overcome the obstacles to success, and lack of confidence, on the contrary, is one of the reasons for his lack of

success. Thus, in the opinion of W. Vendlandt and H. Hefert, self-doubt manifests itself at various stages of the process of regulation of behavior – behavior in goal, planning and implementation of activities and in evaluating the results of actions. It can occur if the habitual or planned course of action is broken. In addition, self-doubt arises as a consequence of negative evaluations of oneself, when one's own achievements are underestimated. As a result, the individual gets used to negative evaluating himself, his achievements, abilities and goals.

Thus, uncertainty distorts the personality and therefore requires an effort that will overcome it and help to form a healthy self-esteem. Scientists studying the problem, recognize that the skills of confident behavior and communication influence the effectiveness of training, and are just as important as the training of the person as a whole [184]. But still, nevertheless, are not particularly disclosed the content, structure, the necessary conditions for the formation of this personality trait.

As a result of a research it was found that a high level of confidence is peculiar to only 27.3 % of students. For the majority of students (63.8 % of subjects) it is characterized by its average level, there are students with low confidence (8.8 %). The results do not differ much from the students of the second and third years, apparently, these issues at this stage of education have been neglected [78, p. 280].

The first step in the formation of self-confidence is adequate self-evaluation of students. One of the fundamental features of a person consists in the fact that it performs continuous self-evaluation of the actions, decisions, its personal significance. Self-evaluation is the relationship of man to himself, which is added gradually and is important to him. It is regarded by psychologists as the assessment by personality of itself, its properties and place among other people. Self-evaluation reflects the degree of self-confidence, self-worth and a positive attitude to everything that falls within his *I*.

Self-esteem can be high or low; it can differ in the degree of stability, independence, and criticality. The process of creating a global self-evaluation is contradictory and uneven. This is due to the fact that partial evaluations, depending on what they are formed, may be at different levels of adequacy. In addition, they may interact differently with each other: to be consistent, to complement each other, or to be inconsistent, conflicting. The knowledge accumulated by man of himself, as well as global self-evaluation formed on its basis, determines the formation of a multi-dimensional image of the self or self-concept, which is the core of the individual. [44, p. 95]

The final dimension of *I*, a form of existence of global self-evaluation is the self-esteem of the individual. This is a stable personality trait and to maintain it

at a high level is an important task in the process of learning. Self-evaluation is defined as the ratio of actual accomplishments to what the person claims, what goals he sets for himself. The set of goals determines the level of the individual's claims. It is based on such self-assessment, which has become reliable for the individual.

In his practice a person strives to achieve results that correspond to the self-esteem, contribute to its strengthening. It is an important regulator of behavior and thus affects the efficiency of learning activities and further development of the individual. Positive evaluation gives additional internal activity, forms the belief in oneself and his abilities, helps achieve the desired results. Negative self-esteem has the opposite effect, lowering self-confidence, which limits the choice of methods of his self-realization. Consequently, self-evaluation and self-esteem are the internal conditions of the regulation of behavior and activity.

Self-evaluation may be adequate and inadequate. The adequacy of self-evaluation expresses the extent to which representations of the person about himself to their objective grounds. Its level expresses the degree of real and ideal, or desired conceptions of oneself. Adequate self-evaluation (with a tendency to overestimate) can be equated to a positive attitude toward oneself, to self-esteem, self-acceptance, a sense of usefulness and self-confidence. Low self-esteem (with a tendency to overshoot), by contrast, may be associated with a negative attitude to oneself, self-rejection, a sense of inferiority and self-doubt.

According to the results of the study, 41.7 % of the students are characterized by inadequately high self-evaluation, the high level of self-esteem was 36.8 %, average – 14.4 %, low – 7.1 %. Thus, the learning process is formed by setting students to assess their capabilities, which affects their self-confidence and, on the contrary, the latter affects the formation of self-evaluation. Between them there is a correlation relationship which is visibly manifested in students with adequate high and medium self-esteem, while among students with inadequate self-esteem, this dependence is weak. Among the latter, a high level of self-confidence is characteristic for only 29.2 % of students, while among students with adequate self-esteem it is 62.5 % [78].

The results made it necessary to conduct additional studies to determine the ability of students to reflection conducive to their effective self-knowledge. *Reflection is the personality's thinking about itself, immediate self-control of human behavior in the current situation, the understanding of its elements, the analysis of what is happening, the ability of the subject to the correlation of his actions with the situation and their co-ordination in accordance with changing conditions and its own state.* It is important to note that reflection is not just the realization of what there is in the man, but always simultaneous changes in the

person, an attempt to go beyond the level of personal development, which has been achieved.

The study found that students with an adequate level of self-esteem had a higher level of reflection those whose self-esteem was inadequate. In general, this ability in students is poorly developed. Thus, the low level of reflection is characteristic for 23.5 % of students, average – for 72.8 %, and high – only for 3.7 % of the students. These figures are significantly higher for students, who are characterized by high self-evaluation and a high level of confidence.

The process of education has the potential of intellectual-and-emotional activation of the individual. For example, a call to reflection as a method of self-knowledge and deep penetration into the subject matter and its relationship to it is the awakening of intuition. The process of cognition is activated, removing internal lethargy, apathy, indifference with respect to the subject, to the participants of the process, including self-inflicted. Only if there is a reflection as the inner state of self-knowledge and self-understanding, we can nurture and strengthen self-identity, and self-confidence.

Thus, self-confidence is the property of the individual, the core of which is a positive assessment of the individual's own skills and abilities as sufficient to achieve meaningful goals for him and his needs. The basis for the formation of such an assessment is the result of a positive experience in dealing with the tasks and the successful achievement of goals. Self-confidence is the belief in the possibilities, positive cognitive and emotional attitude.

For the formation of self-confidence it is important not so much the objective success in life as understanding oneself, finding ways and methods of solving problems, the subjective assessment of the positive results of one's actions and the positive opinion of significant people. Positive self-evaluation of the presence and effectiveness of one's skills and abilities determines the courage in formulating new goals and objectives, as well as the initiative with which a person sets to their implementation. It must be backed by successful results of the activity.

In this regard, there is an interesting model "system of psychological support for teens on building self-confidence," which can be used to work with students. During its development the authors based on the conceptual views of A. Prihozhan, E. Serebryakova, V. Romek, O. Solovyova regarding the understanding of self-confidence as an integral characteristic of the individual, components of which are personal, cognitive, emotional and behavioral elements [175, 184].

The personal component is a high level of self-evaluation and self-worth of an individual. A high level of self-confidence in the structure determines the

personal comfort, and expresses the degree of self-satisfaction, and serves as a source of a person's satisfaction with himself. Self-esteem is an indicator that determines the extent to which a person believes himself capable, significant, successful and worthy. In addition, this component includes the personal position of a person who is aware of his strengths and weaknesses, his strong and weak sides.

The cognitive component reflects the strength of belief in person's self-efficacy. It is a person's belief that he is able to successfully implement the behavior required to achieve the expected results in any activity. Alongside, this component supposes knowledge of what self-confidence is, what its use in life can be, as well as awareness of the benefits of confident behavior.

The emotional component characterizes the role of human emotion in his behavior, and social contacts. It reflects a positive emotional background of the person and includes the ability to manage his reactions to exercise patience, stability and balance.

The behavioral component, integrating the above components, provides an external implementation of the behavioral aspects of self-confidence. An example of such an implementation is the initiative displayed by a person in the activity and interpersonal interaction.

Increase of self-confidence among students in the course of training is achieved as a result of the accumulation of professional knowledge, skills and broadening of their outlook. It is at a higher education institution where needs and personality relationships, are formed, as well as its desires, interests and beliefs, ideals and ideology. Of particular importance are the disciplines that contribute to self-knowledge and the development of the inner world of the student, his value system, inspiring beliefs, formed attitudes, self-assessments, self-identity and active self-realization.

It is useful to study the effect on the formation of self-confidence caused by training techniques that have the power of stimulating intrinsic activity of the student. An important role is played by the trainings to be carried out in the classroom with students. It is possible to use role plays to simulate situations that create difficulties for the participants. In this case, the teacher acts as a coach, and the game is based on the interaction with other members of the group participants.

Practicing confident behavior in the course of the training is based on certain principles. Firstly, a teacher, or any participant can simulate the "correct" behavior enacted in the classroom situations. *Simulation is a special method of behavioral response, the use of which is very effective in cases where the team needs to develop new or strengthen not expressed enough forms of behavior.*

Group members learn a new way for them to conduct, watching as their model the other participants or the teacher, as well as their reactions to their behavior. In this case, audio and video models of confident behavior are used.

Simulation is particularly useful when participants have little idea of how to act in a given situation to make their conduct confident. Groups of more experienced members can go directly to the phase of behavior rehearsal. Acting a variety of roles, team members are involved in the group process and acquire useful new behavioral skills. Another component of the process is to develop an effective behavior reinforcement, which is the cornerstone of most approaches to behavior change.

*Reinforcement is an encouragement or any positive response from the teacher or group members.* It is important that any, even the smallest achievement, be reinforced, and not only a successfully completed complex series of actions. The process in which reinforcement is given in small amounts as the practiced reaction is gradually approaching the optimal one which is called the formation of participants' behavior in the direction of the goals that they set for themselves. In some cases, it is possible to modify what is taking place in the interaction group or the behavior of all participants.

An important role in the process of self-development of students plays educating, which is multi-faceted. Educating is based on learning, but is not limited to it. In the process of educating a connection of all assimilated during training with the person as a whole is established. It aims to habituate (train) students to self-development and continuous improvement. Formation of self-confidence, self-esteem, willpower and other characteristics necessary for a successful preparation, is possible in the process of self-education. In this regard, there are many practical advices, some of which are listed in Appendix A.

Self-education is a natural phenomenon in the development of the individuality. It occurs at a certain stage of its development and is the result of education. Thus, if in the pre-school period the mainstream of life is educating and upbringing, in a teen-age, it is supported by self-education, and in youth – by self-education which becomes the dominant process. We can say that self-education is a dynamic, evolving process of the managed by individuality self-development, although it is not the same thing. Self-development grows into self-education, when it becomes a subsidiary to consciousness, and the person begins to consciously work on improving his *I*. It is important that self-education was followed by the processes of self-knowledge and self-improvement, defined by clear understanding of oneself and one's life program.

V. Lozovoy claims that self-education is "an isolated activity knowingly presented and controlled by the subject in order to achieve the results needed for



other vital processes and activities" [116, p. 12]. L. Ruvinskii in his book "Theory of self-education" characterizes it as a human activity in order to change his identity [179, pp. 15–20]. A broader approach in determining self-education is typical of A. Kochetov, who sees it as a consciously controlled by an individual self-development, in which according to the requirements of society, the aims and interests of the person, his projected strengths and abilities are formed [98, p. 45].

*Thus, self-education is a systematic and conscious human activity aimed at the production within oneself of desired physical, mental, moral, and aesthetic qualities, positive features of will and character, elimination of negative (bad) habits.* A way of self-education is control of one's feelings, thoughts and behavior. The result is self-perfection. The need for such work arises in learning activities when a certain level of self-knowledge, is reached, the capacity for self-awareness and self-esteem is developed, when the need for compliance of one's personal qualities with the goals and the achievement of the desired result is realized. If such a "mental program" is formed, it motivates a person to act for its implementation, creating incentives to foster strong-willed efforts in this direction.

At the same time awareness of one's self-concept is part of the overall structure of the individual, to a large extent determining his self-development. It serves as an important regulator of the processes of self, the source of expectations about one's own behavior and of oneself, determines the nature of new experiences and features of its interpretation, regulates the person's social behavior, contributes to the achievement of the internal consistency of the individuality.

That's why when a person has a need for a change of certain qualities in his character or behavior, it is important to put a clear goal and justify the need to achieve it, and it is sometimes useful to define time-limits. Self-education is characterized by planning and organization of one's activities, monitoring and evaluation of progress and results, and if necessary – stimulating or correction of one's behavior. By its very nature it is a volitional process. The more developed a person's willpower is, that is the ability to force oneself to achieve the goals, overcome all obstacles, the more efficient the process of self-education is. These processes are closely linked. Self-education programs as one gains experience, should, of course, become more complicated, refined and more permanent.

Thus, self-education is the process of changing the man himself under the influence of consciousness and will. It involves a conscious and deliberate human participation in diversifying his own personality. With self-education a student seeks to define his goal and to achieve it himself with either familiar or

new to him means and ways. This is a human activity, which is a way of self-realization, self-expression, carried out not by coercion but by personal choice.

The driving forces of self-education, according to P. Osipov are certain contradictions. Firstly, it is the contradiction between the requirements imposed on students and their actual behavior. Secondly, it is the contradiction between the desire and the inability to work due to a lack of rigor to oneself, weakness of will, lack of knowledge of methods of self-education. Thirdly, it is the contradictions that appear as the results of non-compliance of goals with objectives of self-transformation. According to P. Osipov, self-education includes:

- analysis of the self through self-observation, comparing oneself to others, to an ideal; self-esteem, the definition of the qualities that must be developed and improved, and what needs to be overcome in one, the decision to work on oneself;

- setting of goals and development of a program of activities aimed at the self-improvement, defining of what, when and how to do to improve and fix some and to eliminate other qualities to achieve the intended results;

- activity itself – training, labor, professional, cognitive, aesthetic, physical – to achieve the objectives, performed by an act of will on oneself;

- self-regulation of this activity, which provides self-control, self-awareness, self-evaluation of its progress and results, and if necessary, correction – clarification of the goals and tasks, finding the best ways and means of self-transformation [148, p. 90].

The effectiveness of self-education, as well as any other activity depends on the level of interest, motivation, directed to meet the diverse material, social and spiritual needs. Therefore, self-education can be considered as a process of management of one's self, the behavior, the internal state. All the more so for self-education is characterized by the same tasks as the management: the need to select and achieve goals, planning, lifestyle, work, their organization, monitoring and evaluation of progress and results, and if necessary – encouraging or correcting one's behavior.

An important role in the process of self-education of students has pedagogical guidance. The content and form of teacher's work on self-organizing can be very diverse. The task of teachers is purposeful identify and development of students' potential and abilities in mastering their knowledge and skills to use this information to assist them in the process of self-development and self-improvement.

Diagnostics of teachers' orientation on the personal model of interaction with children (V. Sitarov's technique) showed that only 21 % of them have brightly, and 26 % moderately expressed focus on personal interaction model,

the rest are characterized by teaching and disciplinary model. Defining the goals of their activities by teachers (questionnaire "Pedagogical frankness") shows that the predominant for them is training, educating of students, in which the teacher still takes over, not taking into account their ability to self-development (60 % of responses). And just over 20 % of the teachers suggest their support of students' self-development, which shows the willingness of some of them to change the style and nature of the learning activity realizing the priority of pedagogical guidance of the process of self-education and self-learning, their stimulation.

In the process of promoting students' self-educating, the teacher performs the following tasks:

- promotes students' self-knowledge, formation of their self-esteem and reflexivity;
- ensures the integration of students in a variety of activities and social relationships, which helps them master the system of social roles;
- assists students in a certain way to organize their activities, creates a situation of success;
- makes a selection, modification and inclusion in teaching-and-educating process pedagogically appropriate means of self-education and incentives;
- creates pedagogical conditions for the formation of the need-motivational sphere of personality: personal growth needs and motivations to succeed.

V. Lozovoy argues that the incentives that encourage a person to self-development should be divided into two groups. The first of these are utilitarian and practical incentives (people engaged in self-education, because their vital need coerces them to this). Another group of stimuli is related to self-development as an end in itself. In this case, a person is engaged in self-development in order to be able to acquire new knowledge and skills to achieve the desired results in life. G. Chernyavskaya believes that the most difficult methodological problem in the study of the process of self-discovery and self-realization is the integration of the external environment and internal self-development incentives. The author points out that the external conditions can accelerate or accumulate self-development, but by themselves, apart from internal stimuli, they can not regulate it [213, p. 23].

Technique of stimulating students' self-education diagnoses their conditions and qualities of the personality that they must knowingly and purposefully form (the design of personal growth); defining of self-education purposes related to the formation of these qualities; the construction of joint activities with the teachers focused on the formation of these qualities, selection, modification and use of the means to achieve its goals; psychological and pedagogical training of students to work on themselves; revealing the effectiveness of the end result.

Only in the indissoluble unity and relation, interaction the said elements form a complete process of self-stimulation [148, p. 82–110].

Self-education diagnostics is the study of how to consciously and purposefully, regularly and actively the students themselves develop and improve their personalities, what motivates them to do so and, conversely, what prevents them from doing it. It allows the teacher to follow the logic of self-development of each student, the content and methods of their work on self-improvement. An important role is played by the self-knowledge of students that prepares them for the more challenging and strenuous activity – the purposeful self-change.

In outlining the program of self-education, it is necessary to determine the methods to achieve the desired results. It is necessary to ensure control on the part of the teacher, which is to provide methodological assistance to the student, and self-control on the part of the student. To do this, one should use such well-known psychological techniques as self-persuasion, self-hypnosis, self-reassurance, self-restraint (self-suggestion), self-punishment, etc.

The result of stimulating students' self-educating is their willingness to deliberately and constantly work on themselves, forming the respective attitudes that express the value attitudes of students to this process. The criteria for the effectiveness of self-promotion are the inclusion of students in work on themselves, the adequacy of the content, the means and methods of self-stimulation to the content of educators, completeness, depth, regularity and efficiency of self-educating. To such a level the student should come as a result of the use of certain educational technologies aimed at self-education.

The main purpose of the personality self-education technology is creating the conditions for the transition of the process of education into self-education, the introduction of it into self-development, maintenance and stimulation of this regime at each age stage, the formation of self-confidence and self-maintenance tools. "Education encouraging self-education, wrote at the time Suhomlinsky, is, in my opinion, the real education. Teach self-education is immeasurably more difficult than to organize a Sunday pastime" [195]. The path to self-education is through students' independent work.

### ***1.6.3. Independent work of the students and its stimulation***

Independent work is a particular, a higher form of learning activity that contributes to individual psychological characteristics of the student as a subject. Independent work is a conscious, free by choice, internally motivated purposeful activity on self-development and self-education. It involves the implementation of a number of its constituent actions: understanding the purpose of the activity,

the adoption of a learning task, giving it a personal sense of self-organization in the distribution of their actions over time, self-monitoring of their performance.

The role of independent work in training activities and development of the student's individuality has been the subject of study of leading educators and psychologists (K. Abulkhanova-Slavskaya, B. Ananiev, V. Andreev, L. Zhuravskaya, V. Lutsenko, P. Pidkasisty, et al.). They consider independent work of students as organized and controlled by the teacher extracurricular activities of students with regard to their psychological characteristics and intellectual knowledge. It is a means of formation of professional competence, a way of self-development and self-improvement, as well as of self-organization and self-control. Its objectives are:

- developing students' skills or independent work with educational, scientific, reference books;
- forming ability to rationally organize the mental work, during which the student without any external interference, activates his mental efforts on understanding, memorization and learning educational material;
- developing the ability to self-knowledge and reflection;
- preparation of the program of independent work on self-improvement, indicating the time of its execution.

Students' independent work is closely related to the work of classroom teachers, while at the same time it is the most important, and most importantly, an effective source of their development and self-development. The time of this work is not restricted and is regulated by the students. The teacher directs the students' independent work on his subject, both individually and in groups. He formulates the requirements of interim control and performs a final check of knowledge.

The main tasks of the teacher in the management of students' independent work are:

- to assist students in the organization and implementation of differentiated approach to them;
- to stimulate the interest of students to a more profound study of the subject and to the process of self-development;
- definition of the scope of tasks for independent work in accordance with the program;
- methodological support of the studied subjects: training complex (TC), control tasks and questions, information technologies to conduct and verify the results of the work;
- allow students to work by an individual plan and organization of the interim report;

- training in self-study and practice of mental self-improvement;
- monitoring the students' work [41].

New approaches to higher education are focused on the development of reflection and a state of emotional satisfaction in preparation for future professional activities, as well as the gradual self-awareness of its features. Students themselves should see the meaning of their own work, to master the process of their own learning and to become real actors of the educational activity.

Education should provide a powerful breakthrough for self-education, primary sources. Storing knowledge by paraphrases, on ready sources is displaced by personally discovered and thus emotionally charged value-perceived knowledge. Uncritical acceptance of the knowledge is necessary is to replace with their personal selection, structuring, selective assimilation. Taking into account a sufficient level of cognitive activity of students, it is necessary to involve them in such types of learning activities that would develop and improve the basic techniques of self-study: the culture of reading and the culture of listening, maintaining a concise and sound recording (extract, plan, thesis, notes, annotation, abstract, review, the general techniques for working with the book), the search for additional information (work with bibliographic material), the rational organization of time. These and other techniques must be actively involved in the training seminars.

Unfortunately, according to results of a research in this field, many students do not know how to organize independent work, allocate their time, and to exercise control over the activities performed. Even with the ability to work independently some students say that the reception, comprehension, processing and interpretation of essential training information give them significant difficulties.

Despite nearly universal recognition of the need to self-study, not all students are purposefully and regularly involved in it and thus achieve significant results for them. They do not always know how to properly understand and assess themselves, their capabilities, identify goals for themselves, their own strategy and tactics to achieve them. Most of the students, by their own admission, are in need of educational assistance and guidance from the teacher.

One of the most difficult tasks is to develop in students a system of self-regulation necessary for the implementation of the goals. Its importance is to conform to the requirements of the possibility of a student learning activity, that is, the student should be aware of his tasks as the subject of learning activities. The system of self-regulation consists of such components as awareness of goals, strategies and tactics to achieve them, providing the necessary conditions

for their implementation, the program of action, evaluation and correction of the ways to achieve the result.

First of all, the student must realize and accept the goal of learning activity, that is, to understand what is required of him by the teacher. Further, in accordance with the goal, the student thinks through the sequence of actions and assesses the conditions for its attainment. The result is a subjective model, based on which the student forms a program of action, providing the means and methods of implementation. In carrying out independent work students must learn to exercise control over his actions. To evaluate its results students should have information on how successful it is recognized.

It is also necessary to organize teacher control for independent work of students so that it was directed not so much on checking the degree of memorizing the studied material, but rather on the development of their cognitive abilities. To do this, in all the activities it is necessary to create a situation of students' self-managed learning, which includes the following components:

- making teacher's guidance of the person's independent work a priority of the organization of the educational process;
- shifting the focus from teaching to learning;
- forming not only informative, but also professional motivation of students;
- awareness of their (students') self-concept or self-image;
- critical analysis and assessment of their strengths and weaknesses;
- develop a program of self-education and self-study related to it;
- identify ways and methods of independent work;
- the use of practical recommendations and practices of mental self-management of thoughts, emotions and behavior;
- providing self-monitoring and supervision by the teacher.

The process of education has the potential of intellectual-and-emotional activation of the individual. Cognitive processes that unfold in the course of learning activities are almost always accompanied by emotional experiences. Therefore, while training it is desired to provide only positive emotions. This is due to the fact that emotions and feelings have a regulating effect on the processes of perception, memory, thinking, and imagination, personal manifestations (interest, needs, and motivations). Positive emotions fix and emotionally paint the most successful and productive actions, contribute to the emergence of the state of satisfaction and self-development of students.

The pedagogical process implements its main purpose by serving the most important factor in personal growth of the student and the teacher.

To accomplish the objectives of university education system it is necessary to develop the methodology of the process of self-education and self-development in modern conditions, as well as the preparation of various materials for their successful independent work.

In this connection, at the NTU "KPI" there has been designed the course "Psychology of Success", which gives the student a basic psycho-pedagogical training to achieve success in life, the methodological basis for the conscious control of his thoughts, feelings and behavior, helps him to understand himself and his possibilities by means of self-concept, to master the strategy and tactics of setting goals and achieving them. Much attention is paid to the problem of communicative competence of students and its formation. Practical recommendations for self-development and self-improvement are proposed. The content of the course is given in Appendix B.

Creation of a dominant self-motivation for self-development of students, the formation of the cult of self-improvement will help to solve many of the pressing problems of modern education. Today, therefore, it is very important to build students' readiness for self-development and self-improvement.

For the formation of students' readiness for self-development there should be developed such an educational system, which will continuously and purposefully develop not only the mental abilities required for the process of learning and development, but also the ability to self-knowledge, reflection, self-efficacy.

To sum up, taking into account the understanding of the internal mechanisms of education, which is the context and personal self-development tool, it is impossible not to recognize: the pedagogical process implements its main purpose that serves the most important factor in personal growth of the student and teacher.

In this connection it is of interest to estimate evaluation of the role of the university in the development of the individual, given by fourth-year students of the National Technical Institute "Kharkov Polytechnic Institute". While studying the course "Psychology and pedagogy" they were asked to write a creative work on "The role of the university in the development of the student's individual ", expressing their own attitude to the problem. It is interesting to learn information about the changes that, in the opinion of students, have happened to them during training, and the role of the university in the process.

Many students realize that learning activity as a way of understanding the world is one of the main directions of development of the student's individuality, due to the consistent and purposeful activity of the students themselves (understanding the subject matter and the learning task, mastering the techniques



and methods of active transformations of the object of learning, the acquisition of knowledge, skills). Although this is a significant factor to a greater or lesser extent for the training of all students, many of them mention the role of the humanities, which contribute to the increased knowledge about the world in which they live.

"A person with a higher education – says Yulia Sidorenko – should have a universal knowledge that is not only related to his professional activities, but also knowledge of the philosophical views of the world, history and politics of the world: the economy, culture, etc. This develops outlook, greatly influencing students' moral education and forming their social responsibility."

Many students realize that the complex of humanitarian disciplines taught at the university equips students with the knowledge of the world and skills to live in society, to understand their responsibilities in relation to other people and to adapt to life in an ever-changing society, that is, forms the personality of students. Julia Pop sums up her contemplations, reflecting the views of the majority of other students, "Thus, the university provides a lot for the formation of a whole person, because it promotes maturity, teaches taking logically reasonable and informed decisions, to understand and improve ourselves."

However, according to Irina Khizhnyak, an erudite student who has answers to many teachers' questions, the university "gives us the opportunity to develop ourselves. However, knowledge at the institute is given in very large quantities, and this might devalue it. After all, we no longer need to look for an answer by searching through a lot of literature, as there is access to the Internet. We totally forgot how to appreciate the process of acquiring knowledge. Most students do not see the need. If a person wants to know something, he'll do anything for it."

"In order to succeed at college, she continues, a fairly high level of general intellectual development, is required, in particular perception, attention, memory, thinking, erudition. These develop motivation, increased efficiency, diligence and accuracy in training activities. At this stage the skills of rational organization of mental activity are formed, the optimum mode of work, leisure and everyday life develops, a system of self-education and self-important professional and personal qualities is established. It is something that is particularly important for the student, it is, ultimately, the objectives of his activities."

As for Nadezhda Donets, she notes the role of self-education, which is an integral and essential part of self-development of the student. "Work on oneself, she writes, requires from a person setting accurate and clear goals, clear organization of his life, a constant act of will."

Very bright and imaginative understanding of the role of the university in training was given by Alina Talalaeva, who expands on the qualities that the

institute helped her develop. At the first position she put the independence, which is inseparably connected with the formation of self-control and self-examination. Planning is another one of the primary skills that the institute helped, in her opinion, to qualitatively improve. To some extent, there was a confidence in herself. And, of course, training at the institute has made it possible to improve mastery of communication. The Institute has actively formed the ability to listen and hear, speak confidently, articulate her views and arguments to defend them. Summarizing her analysis, Alina Talalaeva argues that the institution not only creates new qualities in a person, but also helps to highly develop and open the existing ones.

This is facilitated, in students' opinion, by sports, student self-government, career center, dance groups, the palace of students, studio movies, and more. An important role in the disclosure and development of the individual is played by self-government work aimed at solving the problems of the university related to the organization of collective work and leisure of students. "Student self-government, says Tanya Cisar, provides an opportunity for the realization of their own ideas and desires, helps to adapt to the new conditions, the forms the ability to work in a team. Here there are entertainment events and activities that promote healthy lifestyles, the comprehensive development that enables to spend their free time usefully and with fun.

Self-government helps to develop such qualities as: communication skills, hard work, leadership, self-discipline, responsibility, activity, friendliness, self-confidence, independence, self-reliance, perseverance, success, patience, dedication, determination and courage. Student government creates the necessary conditions under which the student who faces obstacles and contradictions is taught to overcome them, provides invaluable experience and incentive to work on oneself.

Daria Fedorova wrote that studying at the Institute coincides with the period of the formation of person's maturity. A characteristic feature of moral development at this age is to strengthen the conscious motives. The qualities that many students previously lacked before considerably strengthened, and among them are dedication, determination, perseverance, self-reliance, initiative, self-control. Increases interest in such moral issues as debt, love, faithfulness.

Tatyana Berezina said that the university is focused on the education of such students' qualities as responsibility, self-discipline, communication skills, creativity, focus, willpower. Here we learn how to make our own decisions and take responsibility for them, we develop the necessary skills, cultivate, express ourselves, work on ourselves. This suggests that the educational process cannot be reduced to training only, it has to be versatile.

The university contributes to self-knowledge and self-regulation. So, Julia Shishko argues that self-knowledge can assess a person's strengths and weaknesses, and promotes self-change and self-focusing, formation control of his actions and deeds.

Natalia Bahtinova has specifically identified the results of the effect of the university on the process of her formation during training at the institute and showed the role of self-development in the process:

- first of all, the university has taught me to work, to bring the started matter to the end, I became independent and increasingly rely on my own strength;

- training in the institute has greatly enhanced my culture level, and expanded the scope of my interests;

- I learned how to set goals and achieve them, developing a strategy and tactics, as well as to control my attention in doing tasks;

- I have formed a responsible attitude to what I do, learned to control myself, my words and deeds, and to do nothing rashly;

- I have learned to confront many difficulties through force of will and endurance, not to waste my time in vain and always to try to do useful things;

- began to seek spiritual and intellectual growth;

- learned how to use different sources of information, and build them into a single picture, discarding the unnecessary;

- learned how to work with gusto.

"And the main thing, she concludes, is that my self-development does not end there. I have a lot of plans for my self-improvement".

According to the survey it has been established that not all students understand the importance of higher education. It is often linked to the lack of a clear and conscious purpose, when a person does not see the personal meaning to the actions committed, does not perceive them as significant, important and necessary for himself. The absence of the goals for the student is not conducive to the formation of the ability to assess his gradual progress toward the desired result, the prospects and consequences of his behavior in the future. The success of the activity, the ability to adjust it in the process of self-improvement makes it on a whole very difficult for students with low level of formation of reflection to promote self-knowledge and a sense of confidence in themselves and their abilities.

The most important task of education is to teach students to perceive the activity as a full, intelligent and purposeful. In this case, it is understood that all actions, including monitoring and evaluation, are provided not only by a teacher,

but the learner himself. This requires development of effective methods of self-organization of one's activities. Pedagogical task is to help the individual to understand his place in the psyche of the processes, to learn to manage them, to form the motivation to set goals for himself, to pursue his self-development and improvement.

The following are useful tips of various authors on self-development and self-improvement:

Before proceeding with the development of self-education and self-development, it is very useful to thoroughly reflect on these questions:

1. What do or did you find a hindrance, or a barrier to professional advancement and self-development in the last two or three years?
2. What qualities, character traits provoke you to conflicts, misunderstandings, and other negative situations?
3. What prevents creatively in a professional manner to solve your tasks?
4. What exactly do you miss: the knowledge, skills, abilities, some personality traits, or relations, friends, living conditions, money?
5. On what do you spend your leisure time?
6. In what areas of self-education and self-development can you achieve significant progress as soon as in the next year?
7. Who and what will be able to assist you in self-education and self-development?

Try to answer these questions, preferably in writing, and briefly. This will allow you to have the original database, which provides a sound basis for planning your self-development.

In developing a personal plan of self-education and self-development such areas of your life should be identified:

- 1) Educational-and-training;
- 2) The future professional activity;
- 3) Self-knowledge and self-improvement;
- 4) Communication;
- 5) Leisure.

In the process of self-education you have to be aware of the following principles of independent work:

*The principle of self-discovery.* For the practical application of this principle the following rules can be recommended:

1. Constantly make sense of not only what you do but how you are doing. At the same time, pay attention to the most effective techniques and methods of work.

2. Keep a diary where try not only to analyze the reasons of your success, but also of failures.

3. Develop the capacity for self-analysis and reflection of thinking. To do this, constantly explore your strengths and weaknesses. Rely on the strengths and constantly monitor weaknesses.

*The principle of goal-setting and creative self-determination* may be used based on the following rules:

1. "Have a purpose for life, for years, for months, for weeks, for the day and hour and minute, sacrificing lower goals to higher" (Leo Tolstoy "The rules of life").

2. Remember that "he who does not know what harbor he is swimming to, has no favorable wind" (Seneca).

3. Having set a goal, go for it, gain its achievement, come what may.

*The principle of planning can be represented by the following rules:*

1. When planning, consider the time, set a realistic timetable for achieving the goal.

2. Plan what you can do today, tomorrow, this week, in the long term.

3. Once in a while clock the time, look for the reserves of time.

*The principle of self-organization and its rules:*

1. Learn how to get down to business right away, without the "swing".

2. Getting down to business, focus on the essentials.

3. Change the type of occupation, invent incentives for yourself.

4. Obey what is planned, and do it well.

5. More often use the phrases "I have to do it", "Forward and only forward".

6. Every evening, give yourself a self-report of your deeds and actions.

7. Remember the words of poet N. Asadov: "Do not let your soul be lazy, so that not mill the wind. Soul must work both day and night, and both day and night!"

*Principles of optimism:*

1. Do not rest on our laurels and do not give up, even in cases of temporary setbacks.

2. Tell yourself, "I can do more! I did solve more complicated problems!".

3. If that fails, look for a new method, a new means of solving the problem. Remember, optimism and faith are the key to success!

4. In other people always look for the good and not the bad side.

Taken separately, a principle or rule is rarely used and cannot guarantee you success. A system of continuous work on self-improvement, is required, taking into account the actual conditions of life and abilities. And do not spare efforts to achieve the desired results!

### **Questions for self-control and verification**

1. Give the definition of "personal self-development."
2. What is the role of representatives of humanistic psychology in the study of personality's self-development?
3. What is the role of acmeology in the study of self-identity?
4. What is the content of the principle of dominant by A. Ukhtomskii?
5. What are the conditions that determine the effectiveness of student's individuality self-development?
6. What is needed to encourage self-education?
7. What is the content of the system of self-regulation i?
8. What does the term "readiness for self-development individual?"
9. What is the essence of self-study?
10. What is the role of pedagogical support in the process of self-education?

### **1.7. The role of mental self-improvement in the activation of the students' potential**

#### ***1.7.1. The mechanisms of self-regulation of mental state of a person***

The full potential of a person means the maximum use of his opportunities at all levels of life – physical, mental, and spiritual. The first level involves having a healthy body in which organs, feelings and the nervous system function normally, in agreement with each other. The second is the ability of a person to fully use their mental capabilities, and the third is the need to live the spiritual kind of life in all areas of everyday life. The full potential of a person means a perfect coordination between the physical and the mental, intellectual and spiritual aspects of life [127].

Modern psychologists say that the potential of the brain is used by only 1–5 %. It was found that the number of potential neural connections in the brain of a man is more than the number of atoms in the entire visible universe. It follows that the abilities of the brain are not limited, and each of us has the potential for improvement. In humans, there are great reserves and resources that will enable to discover and exploit the potential of man in all its fullness. A major role in this process belongs to psychology. Therefore, not without a reason, a number of influential scientists have expressed the idea that the twenty-first century is a century of psychology, the attainment of which will contribute to the personal development and self-perfection of the person.

It is the task of psychology to:

1. Make the mind strong.
2. Increase the creative power of the mind.
3. Give a person the opportunity to use his full intellectual potential.
4. To develop techniques by which one can realize all the hidden powers of the mind.
5. Bring more satisfaction to each individual, peace and internal happiness, increased efficiency, and creativity.
6. To develop the ability to concentrate, along with the strength of will and the ability to maintain inner balance and peace.
7. Develop self-confidence, patience, clear thinking and power of thought [127, p. 252].

The human body is a continuous process of certain mental states that are constantly replacing each other and characterize its activity. They determine the regulation of the internal processes in the body, behavior and human activities. The mental state is an integral characteristic of the human mind at a given particular point in time. It is viewed as a process of adaptive response to changes in external and internal conditions, aimed at achieving a positive result and manifested in degree of opportunities' mobilization. Depending on it is the course of all the regulatory processes of the body (biochemical, physiological, mental health), as well as a manifestation of personal properties of an individual.

A big role in improving of the vitality of people is played by the psychic self-regulation. Each person is characterized as having both conscious and subconscious levels of self-regulation. At the same time, the both levels should have the same goal, then the psychic self-regulation will be successful. The link, connecting the conscious and subconscious, is the will which controls the body, mind and action. It is found that self-evaluation of human mental tone can be achieved by changing the overall behavior of his body, as well as by emotional or physical reactions. In their turn, these reactions through the reverse neural connections affect the brain and thereby change the intensity of its operation.

The theory of self-control of mental tone needed for optimal human activities in the given conditions was proposed at the time by the American psycho-physiologist H. Freeman [206]. According to this theory an the extreme mental activity that occurs as a result of an excess of nervous energy, leads to its discharge with speech or motor responses or physiological functions of internal organs. Conversely, a lack of mental activity is accompanied by the switching on of the brain mechanisms, causing local or general stress of skeletal muscle, which increases the level of wakefulness.

Exploring the complex responses of the body to different irritations, A. Krauklis found that any response reaction includes primary and secondary adaptive effects. The primary effects are a direct response, the response of the organism to a specific impact, while the secondary cause unspecific reaction consisting in the change in the general level of consciousness of the organism and are the main mechanisms that provide conditioned reflex self-regulation of the level of its overall activity [101].

It was established experimentally that a high level of brain's wakefulness provides more complete analysis and synthesis of the perceived information, the best use of the experience gained, and thus forms the more accurate responses. Under these conditions, the activity of the body most closely matches not only the current situation but also its probable change in the near future. Therefore, if a person can mobilize his willpower when facing difficulties and successfully overcomes them, then there is a reason to speak about the high level of self-regulation of his higher nervous activity, or to the contrary.

Thus, the problem of self-regulation is to ensure the adequacy and efficiency of behavioral responses, i.e. high level of adaptive efficiency of mental activity in general. Understanding the meaning and mechanisms of psychological techniques increases their effectiveness, because in this case there manifests a strong catalytic role of consciousness. Let us consider the nature of the basic mechanisms of self-regulation of the activity and peculiarities of their manifestation in behavior reactions [47].

#### *Self-regulation by response*

Self-regulation through a "response" uses the ratio between the detained activity that is circulating in the brain, and the activity coming out of the brain. If the amount of energy coming out of the brain is more than that of entering it the tension of mental activity decreases. And vice versa – with an increase in the level of consciousness the inflow of external information into the central nervous system is reduced, thereby preventing overexcitation of the body. This cyclic neural activity is the main condition for the smooth implementation of all the basic functions of the brain.

It is known that at a strong and sudden impact on a person's psyche in his brain there develops such a high activity, that it cannot be easily balanced in its own systems of the brain, and the flow the most of it is switched to the outer motor and speech reactions. In such cases there's simply not enough time for the timely formation of nerve "breaks". But if they have been worked out in advance, it's possible that the same irritant may not necessarily result in corresponding motor responses.



Quite often, seeing sudden and strong emotional stimuli of a negative character, a person, for whatever reasons, has to inhibit the natural movement and voice components of responses. In these cases, the neural activity of the brain is routed to the internal systems of the body, causing severe strain across them. Typically, such reactions occur as a rise in blood pressure, pronounced palpitations, shortness of breath and other changes. In the most complex cases it can lead to a decrease in the protective forces of the organism, its immune system and susceptibility to various diseases. In addition, not reacted adverse effects often cause an extended period of mental stress, which greatly aggravates the situation. That's why folk wisdom from ancient times has recommended to "not remember of evil", "do not get stuck on the sorrows and grievances". Otherwise "the principle of the boomerang" is activated. In other words, the discharge, reducing tension, not only is a normal reaction, but it is even necessary.

*Self-regulation by changing the inflow of external energy*

Self-regulation by changing the flow to the brain of nerve pulsing is somewhat different. If the first type of operation activates in order to eliminate functional changes already formed in the central nervous system, the second type of self-regulation is to prevent possible mental stress.

In physiology there is established the critical role of skeletal musculature as a powerful source of nervous impulses coming into the brain, and the ability to widely change the level of wakefulness. At the same time, muscle tension improves the work of sense perception organs. Conversely, muscle relaxation, depriving brain of stimulating impulses, leads to a decrease in the level of consciousness. As we know, the greatest relaxation of skeletal muscles occurs during sleep and is correlated with the depth of sleep. Therefore, for people who have not developed the ability to eliminate residual muscle tension it is a more difficult to fall asleep or they have other sleep disturbances.

The second element in the system of self-regulation of mental stress by altering the flow of nerve impulses is the mode of respiration. In the works of Soviet physiologist A. Roitbak the processes are described when nerve impulses from the respiratory center spread along special nerve pathways to the brain's cortex and quite significantly affect tone: an inhalation increases it, and exhalation reduces it. That is why the maximum physical effort can be achieved by a person at the moment of holding his breath at inhalation. Consequently, the type of respiration, in which the inhalation is made in slow motion, and exhalation quickly and vigorously, tones the nervous system and increases wakefulness.

Type of breathing, which includes a short inhalation, stretched and slow exhalation of breath and a slight delay, causes a general reduction in the tone of the central nervous system, lower blood pressure, slower pulse. Thus, in situations that require urgent increasing and support of mental tone or emergency braking down response reactions to the current or expected stimulus, the desired effect is achieved by voluntary muscle tension. If, however, a very high muscle and mental tone are formed prematurely and there is sufficient time to enable the internal brakes, it is advisable to use the techniques of complete muscle relaxation combined with relaxing type of breathing.

These are effective methods in anticipation of the impact of negative emotional factors. It should be borne in mind that the full muscle relaxation can be achieved only with a relatively high initial tone of the nervous system. Only under this condition there remains the ability of good concentration required for complete relaxation of the muscles and the neutralization of distracting thoughts and images. Another important detail: the most complete muscle relaxation occurs during deep exhalation.

#### *Self-regulation by changing the external conditions*

Self-regulation of mental tone by varying external conditions is perhaps the best known way to correct the self-feelings and states. It includes many forms of human impact on the external environment, which, through feedback exert a stimulatory or inhibitory effect on mental activity.

Currently, the problems of governing mental tone of human by external stimuli find increasingly wider practical application. Of interest are the studies by Muratov, showing the stimulating effect of the functional music on the status and capacity of the operator. It improves the capacity of work and effectiveness of relaxation in the performance of monotonous work. In many cases, functional music neutralizes discomfort caused by environment. According to G. Berezina, after special influence by music productivity in a number of cases increased by 30–50 %, and the number of errors was reduced by 21–23 %.

The influence of color on a person's mental state was noted by J. Goethe. All colors, from this point of view he shared into 2 groups: the colors animating, exciting (red-yellow colors), generating anxiety and mildly sad mood (blue-violet). Green occupies an intermediate position and induces a state of calm tranquility. Red-orange-yellow colors produce the sensation of warmth, blue colors evoke a feeling of cold. Artists have universally adopted the distinction of warm and cool colors. Thus, the methods of psychic self-regulation of tone by changing the external conditions are effective and very diverse, although there has been not yet established a conventional system that would use not only the empirical evidence, but scientific data.

### *The role of sensory images in self-regulation of the mind*

An effective means of influencing the nervous system is the use of the active role of sensory images representations (visual, auditory, tactile, etc.). So far we have underestimated in our daily life the exceptional role of mental images, which are a very active instrument of influence on the mental state and health. Constant holding before the mind of dark, bleak images sooner or later affects human health. And light, optimistic images and ideas act in quite the opposite, favorable way. It should be borne in mind that in the state of muscle relaxation effectiveness of mental images is much higher. This effect is used productively in autogenic training.

Humanity has accumulated vast experience in the use of empirical efficient role of sensory images in order to actively control the state of the mind. Hypnosis, autogenic training, NLP technology, and other techniques of identity self-programming have as the primary constituent techniques which include "manipulating" of sensual images. The peculiarity of the human psyche is that it can distract from the real world and be guided by a suggested image. In this case, the power of the mind at this point is equal to the force and grandeur of the image that has captured it. For example, a German physician H. Lindeman, who alone crossed the Atlantic Ocean in an inflatable boat in 72 days, speaks on this issue quite clearly: "Special exercises, including feeling of warmth in the body, he writes, protected me from painful boils that are inevitable in the long immobility and exposure to sea water"[114, p. 20].

As an example of the extraordinary effectiveness of imagined images a particular artistic biography of I. Pevtsov can serve. As a child, he was a stutterer. When he told relatives that he wanted to become an actor, he was called a madman. However, he started to train hard and by means of internal will-strain, fantasy and imagination he brought himself into a state where his speech was becoming normal. It is a highly organized imagination that could hold for a long time the focus on the image presented, helped him not only to overcome the "impossible", but also make a big contribution to the theater.

### *The role of speech in the self-regulation of mental tone*

A truly scientific understanding of the psycho-physiological mechanisms of influence of verbal suggestion on the processes occurring in the body was obtained as a result of the work by I. Pavlov on higher nervous activity. Thanks to these studies it became possible to explain how the word of one person may have an impact on the other, what are the mechanisms of suggestion, self-hypnosis, suggestibility, and what the role of these phenomena in human life is, the origin of certain diseases and their treatment. The study by K. Platonov "The

word as a physiological and therapeutic factor" laid the methodological foundations and the main trends in the study of this complex issue.

The impact on the physiological functions of the body is due to the regulatory and the programming role of the word spoken not only loudly, but also mentally. This property of inner speech (in the form of self-suggestion) has long been used in sports to enhance the effectiveness of training, mobilization of internal resources during competitions. In a state of relaxation that is achieved in the process of autogenic training, the effect of verbal self-suggestion on the physiological functions is greatly increased. The character of this influence is determined by the semantic content of verbal formulations. Sentence structure in self-suggestion must be extremely simple and concise, and their mental pronunciation – slow, to the rhythm of breathing.

### ***1.7.2. Managing thoughts and words***

Our fate is largely determined by our thoughts. The world around us is such as we mentally represent it. Our life situations and surroundings is nothing more than materialization of our thoughts. The limited thinking entails the restriction of our ability. Any thought that is born in our minds is in the end implemented. A directed and partially concentrated (condensed) thought can move objects. There is indisputable proof of the influence of thoughts on the physiological processes that occur in living organisms, and even at a very large distance (known as phenomenon of thought-transference).

Researches of thought energy were conducted by scientists in the mid 30-ies of XX century. By that time the first shots of thoughts as energy phenomena were obtained, and patterns of the influence of this energy were studied. This work was the most successful in America, where professors Rein and McDougall worked on thought-transference. For several years it has been found that to do this people need not have to possess any phenomenal abilities, and can act within the limits of reason and faith. Interesting were the experiments of Dr. Anita Mule. With the help of an apparatus trapping subtle pulsations of the heart, she found that a high thought highly increased the stress and thin vibrations, while an everyday thought decreased them. This suggests that there is an impact on the overall quality of thought on physiological state of a person. In this case, there are literally light and heavy thoughts and feelings. The ancient Greek philosophers spoke of the clouds of thoughts and feelings that are in the air and can affect people's lives, and even inanimate objects.

The power of our thoughts is determined by their strength, depth and warmth. Thoughts are powerful when they are constantly cultivated and cherished.

Constant thinking, desire or imagination of the same idea makes a great contribution to its materialization. The strength of the human mind knows no bounds. The more focused the human mind, the more power is concentrated in one point. An ordinary person's mind is scattered into many affairs and concerns, with the leak of mental energy in all directions. Concentration of consciousness on an object is required, there is a special technique for this. Development of attention and mental peace stimulates the attainment of a good ability to concentrate. Physical fatigue, excessive chatter, overeating, excessive socializing, prolonged walking, unbridled indulgence to sexual desires – all these are obstacles for the concentration of thoughts.

In order to strengthen the power of thought it is necessary to organize one's thinking stopping its chaotic job. To do this, choose a theme and think about it in different aspects and from different angles, not allowing extraneous thoughts to enter conscious mind. Let the thought flow smoothly from one point of view to another in order to cover all aspects. One should fix the mind at one point, and then move on to another topic. Through this practice one can develop orderly operation of thought, which will gain stability and strength to become a well-defined and clearly delineated. Ordinary people who do not know what a profound meditation is, have vague and uncertain mental images. Those, who practice concentration and meditation, develop the ability to create expressive and well-designed mental images. A strong, bright idea with a purpose, deliberately sent, creates a mental image which will seek to implement the idea embedded in it.

The thought is information. Thought energy allows to make this information an impulse, and a signal, and to transfer it to any part of our organism. If you concentrate your mind, focus on one idea, and repeatedly direct it to one area of sensations, in this case with the aid of the imagination it's possible to transform the meaning of the thought first into image, and then in reality. Thus, the information can reach its goals and influence the mental and physical state of organism. On the basis of the correct thinking, reasoning, self-observation one should bring clarity in his thoughts. Then confusion will disappear from the mind, the thoughts will become stable and well-founded.

To master the practice of mental self-improvement, one has to learn to control his thoughts. Thought should be subordinate to the will, and for this one needs:

- ability to focus one's attention on any particular thought, to understand its meaning and content;
- mastering the concentration of thought, and one should let go of the idea not at once, but gradually, and do it at will, and not spontaneously;

- changing the content of your thoughts, replacing the one thought by another (consciousness can hold only one thought at a time, and therefore it is possible to carry out the replacement of one thought by another);
- mastery of positive thinking (positive thinking includes a positive view of reality and the use of the same utterances to express thoughts and feelings);
- creating mental images that will seek to implement the idea embedded in them;
- ability to subordinate thoughts to one's will.

*Exercise to master concentration of thought*

Concentration is a very important thing in the work of mind and the whole organism. It is therefore important to strengthen attention and focus on your thoughts. To do this:

1. Lie down on your back. Relax your body. Focus on the first thought that came to your mind. With your mind leisurely explore the content, the images that arise, recognize the meaning.

2. Do not let go of the thought for a while out of your head. You should feel the holding that thought in your head as much time as you can. Try to make the thought short or long in time.

3. Having comprehended the delayed in the mind thought, replace it with another one. Do this as if you were switching the radio channel and tune into another wave. With the new idea do the same. This exercise should be done each day, until you feel that you can dominate any idea, and can hold it in your mind.

4. To master the full concentration, try to keep thoughts in your mind as often as possible, especially the thoughts having a positive content. As a result of this exercise the assimilated skill will become a habit, and you will learn how to focus your attention on every thought emerging in your head instantly. It will bring satisfaction as you will become the absolute master of your thoughts and be able to correct them, regulate and even control them [139, p. 527, 528].

Most people do not know how to keep a clear view of the image of the subject and remember even simple setting. But attention and clarity of thought train memory, allow a person to adjust the state of the mind. People who own a concentration of thought can have different abilities: to ease pain, heal wounds, reduce arterial pressure, improve mood, and affect the psyche. The art of concentration of thought is the basic practice of psychic improvement. Everyone can develop the ability to concentrate. The active attention is also associated with such important mental functions, as will and consciousness.

*Exercises for mastering the concentration of thought*

1. Ability to control the concentration does not come immediately. You start with a simple exercise of attention. Get accustomed to a certain subject. Have a close look at any object, then look away and try to mentally reproduce what you saw. Acquire the ability to focus on little things.

2. During the exercise it is necessary to get rid of everyday life, to reject the outside world. Focus on the sensations and feelings. Learn how to focus your attention instantly.

3. Receptivity of the mind should be trained to manage a thought in order to sharpen attention, concentration. Concentration is an effort of will and imagination. At the same time, try to keep the inner physical and mental relaxation.

4. Use the technique of focusing attention and concentration to create images. So, create in your mind the image of some object known to you. Explore it in your inner vision, then go to it and check whether your idea of it corresponds with it. Try to do in your inner vision an accurate reproduction of any subject.

5. Self-control and concentration are gained by constant practicing. Try the following exercise. Look for three seconds at your chosen object. Then you're your look away from it and try to describe in detail all the details of this subject. While practicing, each time compare to determine if you have managed to see and describe the more and more details of the object correctly.

6. Move continually the pupils of your eyes along the set of the points of the surveyed object. Start with a few seconds, then look away and try to re-create the object in its entirety. First you will remember a few characteristics, and then more and more. In training you can achieve perfection and attention to details and images of any object.

7. Develop the ability to reach a certain concentration of thought and attention on a problem. For example, the problem of painful sensation that you experience from time to time. Focus your mind on it; examine it in detail, interpret it as a negative memory. Convince yourself that if you can call a memory, you are also able not to do that. This means that you can work with memory as you please.

8. Withdrawal of the senses from the objects is associated with the termination of an active mental activity connected with the directing of attention to it. For this you have to focus on a single thought. The content of the thoughts create in advance. This is a new thought-form. Train for the remembrance and concentration at the same time. Realize that by concentration of thought you can

remove the memory. Learn how to instantly distract from a thought by transferring it to another topic.

9. Prolonged retention of attention on an object, thought, feeling, and image. Learn how to hold one thought for a long time. Determine how much time you can look at the subject, concentrate attention on it without distraction. Very few are able to keep the attention for more than a minute. Train your attention and focus by timing it.

10. Create a short thought, momentarily interrupt it with a pause in which think of nothing. Then play back the same thought, and pause again. And just repeat at regular short breaks. The idea, like an arrow shot from a bow should soar, fly, but not slip from your attention and be aimed in one direction, strengthening its power.

11. Strengthening a thought is possible through psychic energy and vibration of feelings. The idea is enhanced by the use of suggestion and imagination of the. At this time it is sent by internal sensation first to occipital region of the head, and then to the center between the eyebrows.

12. Intellectual training of thinking must be constant. In this case, the thoughts with negative content should be kept under control with the idea. Such thoughts are replaced by means of concentration by prepared in advance positive metaphors.

13. The development of extrasensory perception of the reality in many ways is achieved by concentration of thought. Create a complete estrangement from everything that concerns you. Focus your attention on the nature. Behold a tree, clouds, lake, forest. Thus there is contemplation, a perception of the object of observation. Every detail is viewed and analyzed by the mind. Then, without losing the thought of the object, you should close your eyes. In your mind reproduce the remembered picture, recreate it in all details.

14. Contemplation is one of the traditional ways of achieving concentration of attention, concentration of thought. In this state consciousness and what it contemplates are formed integrally. This may result in development of elements of the ability of intensification (sharpening) of senses, that is, extrasensory perception, of the experience of merging with infinity [139, p. 545–549].

It is known that the spoken words we pronounce have tremendous power, but many of us do not understand the importance of them. Words are the basis of all that we regularly reproduce in our lives. We always say something, but we do it casually, rarely thinking about the content and form of our utterances. We do not pay attention to which words we choose. And it turns out that most of us use the negative forms of the expression of their thoughts. And it should be always



kept in mind that "a word can kill, with a word one can be saved, a word can lead regiments!" And if we can think about what we want to say and shall not allow anything negative, then we shall master the mechanism to control our thoughts.

The Institute of Brain of Russian Academy of Sciences a group of scientists led by a prominent molecular biologist P. Goryaev performed research on the power of thought and the power of the word. Using the technique developed in the laboratory, the scientists came to the conclusion that the DNA molecule perceives (understands) human speech! And more than that, under its influence, these molecules responsible for heredity, change their shape and structure. This means that each person affects his own life program with his speech.

It turns out that if a person is in his speech constantly uses filthy language – swear words that carry a destructive charge – his chromosomes begin to distort and deform. And to such an extent, that the modification of the DNA molecule occurs, and it starts to produce the negative program, leading to self-destruction. Hence there are all the associated negative consequences to the life of the man himself and his descendants. Scientists fixed: an expletive causes mutagenic effect similar to the radioactive emission power of a thousand Roentgens. Thus, every word uttered or perceived by us, affects us directly or implicitly. Therefore, you should protect yourself and others from abusive words, carrying death and destruction.

So, words are like seeds that fall on fertile soil – our brains. And what is sown there will sooner or later we shall reap in the form of tangible results. These fruitful ideas have formed the basis of many of practical recommendations aimed at achieving success, published in Western literature and found wide recognition all over the world. They should be the subject of study and training of students in the educational process, as well as in the process of self-education and self-improvement.

### ***1.7.3. The role of positive and negative thinking in activation of students' potential***

The process of positive and negative thinking has long been an object of attention of scientists. As early as in 1950 – 60's a whole series of books about the so-called "positive thinking" and its role in self-education personality appeared. The attitude toward it was contradictory. They were read mainly by people who had already had it one way or another, their instinctive attitude on optimism received continued support. Some people treated these books with respect, but without hot enthusiasm or boundless confidence. In this case, any improvement in the way of thinking proved short. A careful study of the positive

thinking of those years shows an abundance of rhetorical phrases without sufficiently accurate knowledge base. Today the situation has changed, a lot of experimental evidence of the results of "positive thinking" have been received.

The positive thinking involves a positive outlook on things and uses the same speech to express thoughts and feelings. It is a bit of self-hypnosis. Positive thinking is fixed on success; it does not program an evasion from defeat but victory. At the same time it creates a state of spiritual harmony, which is largely accompanied by a person's contentment and a related state of inner peace and joy, which in itself is unique. If we feel happy the world around seems to us beautiful and brilliant. Thoughts are the main source of our good mood. A right thought develops into a right action and into a correct way of life.

It is established that an idea has a corresponding effect on the human anatomy in general and in particular. Each depressing and alarming thought that pops into our head, has a depressive effect on every cell of the body and contributes to the emergence of a disease. Therefore a positive perception by a person of himself and life in general is the cornerstone of his health and gaining success. Optimism is an important precondition of our health because our thoughts, attitudes, and expectations cause considerable influence on the human body and the results of his activity. Two hundred years ago, W. von Humboldt supposed: "There will come a time when the disease will be recognized as consequence of wrong thinking."

Modern medical research shows that healthy people are more optimistic, more adaptable than ill ones. They are active in solving problems, in critical situations they rely on their own capabilities and strive consciously or unconsciously, to the personal responsibility, autonomy and independence. Optimists are healthier than pessimists, and their defensive system of the body functions better than that of the negatively-minded people. People with a positive perception of the world produce intensively endorphin ("happiness hormone") and there is observed coherence of their brain functioning. Optimism, according to the latest research in the area of the brain is also a consequence of improved interaction, increased synchronization in its two hemispheres.

If a person is pessimistic, a small irritation can lead to a chain reaction of adverse chemical processes in the body, when at all intermediate stages there occurs an influence on the autonomic nervous system. Simultaneously, the brain releases various chemical (neuro) mediators that depressingly affect the immune system. A man's personal attitudes, his feelings and reactions are responsible for physiological and chemical processes occurring in his organism and whether its protective system is activated or blocked.

American psychologist M. Seligman studied for fifty years on the example of known basketball players, how negative thinking affected the state of their health for a long time. He studied their comments in the old sports magazines and newspapers, trying to find out which players were characterized by negative thinking, and compared it with their current state of health. The result is clear: those who were pessimistic in their later life often had an allegedly lower life expectancy.

At present, more and more people suffer from negativism, they are often without realizing it obsessed with negativity. It is the result of "contamination of the inner world" and the negative life experiences and it concerns both attitudes and modes of thought and behavior. This is the reason that more and more people are set up today rather pessimistic than optimistic. They develop patterns of thinking, and behavior patterns characteristic of the "losers", which to a considerable extent differ from thinking and behavior of the "winners".

It can be said that the winners see the glass half full, not half empty, as is the case with pessimists or losers. Optimists are able to perceive themselves and others with all the strengths and weaknesses, while pessimists feel themselves inferior. The winner is able to enjoy his success and may encourage himself for it. The loser, on the contrary, is always dissatisfied with what he has achieved. Because of the uncertainty of his strengths he reacts to criticism more painfully and suffers defeat hard. Even at retaliatory strikes the winner doesn't lose faith in him, because he believes in his abilities. He has a sense of responsibility and is able to manage his life. A loser, on the contrary, shifts the responsibility to the others for his life and his failures.

Another important difference between them is their relationship to time. The winner consciously lives in the present, he deals with the past and is able to responsibly plan for the future. The loser lives mostly in memories of the past and fear of the future. The winner has a high degree of self-perception, credibility, self-assertion and self realization, the loser lacks in these characteristics and abilities. All people with negative thinking possess to some degree an internal critic. It monitors and evaluates their behavior, whether they acted well or badly; it also maintains a strict account of errors and weaknesses, but does not mention the strengths and positive aspects.

People with negative thinking often:

- are unrealistically distort reality, one-sidedly perceive the negative;
- are characterized with unacceptable generalizations: if something goes wrong, refer to it to themselves, look for "guilt" within themselves
- in their calculations are based on the immutability of the particular situation;

- evoke negative emotions such as anger, a sense of guilt, fear, stress and depression.

Positive thinking, in contrast, is realistic and sees both positive and negative side of things and events. As for people with positive attitudes and ways of thinking, they:

- perceive themselves with all their advantages and disadvantages;
- exhibit a healthy self-confidence;
- are glad to even small successes and able to get pleasure from them;
- see the meaning of their life;
- calmly perceive rightly expressed criticism;
- try to get out of the confusing situation to the best advantage;
- glad to praise and recognition, and can accept them;
- do not feel any fear of the future, as trust their own abilities;
- trust other people and listen to their opinion, even if it differs from their own.

In summary, we can conclude that the thought is converted to personal view and end up in the belief that after penetrating the subconscious directs our lives, including our relations, actions, emotions, and environment. Way of thinking can be positive and lead to success, health, happiness, and other desired effects. On the other hand, it may be undesirable and lead to adverse results. For the most part under the influence of both favorable and unfavorable mood a person combines all aspects into a single whole, which is determined by the previous consciousness and experience. Coherent internal and external forces can result in a change of consciousness and the ensuing behavior.

Our consciousness, as we know, determines our behavior and experiencing all of the areas of reality. We should pay more attention to the positive side of life and try to avoid anything that clogs the subconscious with unnecessary negative content, such as movies with scenes of violence, etc. It's advisable to keep neutrality towards all the negative that we cannot change. The way of thinking can be influenced by diet, as well as measures to eliminate toxins and cleanse the body. Disinfection of the body can lead as a result to mental and psychological "clearing". Mental trash in the form of negative mental representations distorts the perception of reality.

As a result of bodily and spiritual purification one can begin to positively perceive oneself and others. There are such favorable and sound therapies as smell-therapy that affects our thoughts through our state of the body. To achieve inner peace and balance will help yoga and breathing exercises, which positively affect the thinking process. This is also actively contributed by various

techniques of muscle relaxation, autogenic training, prayer and meditation. An important role in this process is played by the various practices of mental self-perfection.

The next stage in the mastery of thoughts is to learn how to not only focus attention on each of them, but also to change their contents. In this, topic with negative memories theme should be replaced with a topic that warms the soul, gladdens heart. It is like creating a new story, writing a script for one's thoughts, replacing negative with positive topic. This way one can control the work of the psyche and clear thinking from negative thoughts. Gradually you tranquillize and come to a state of balance and peace.

*Exercise to change the content of your thoughts*

In order to master the skill of managing the content of a thought for your own purposes, you have to train as follows:

1. Pick up a book and start reading. Without ceasing to read the story and holding the plot in your head, try to think at the same time about something else.
2. Every time you do an exercise in concentration, hold the thought you might have. Understand the content of the thought.
3. When the content of the thought is realized, not losing it, immediately by force of mind create the continuation of the story.
4. Learn to extend the content of the thought and willfully terminate it. Create logically complete stories.
5. Take a new idea for the exercise. Without interrupting its contents, create with the second thought any other story, unlike the one that occurs in the content of the first thought.
6. Break the content of the old thought and move on to the content you have created for a new scene. Bring it to its logical end.
7. Think of a negative story from your life. Then remember a happy one. Save the contents of these two thoughts.
8. Experience the negative history. With the second thought immediately layer happy memories on it. Break the negative experience and re-direct the thought only to a positive theme. Do not allow the mind return to the past unpleasant memory.
9. Make up a scenario with pre-defined positive content. They will be your new positive thought-forms that you use when you will come to negative thoughts. They will change the contents of the old unwanted memories.
10. It is best to create positive information in the form of short thought-forms to every negative experience, especially related to the bad state of health, and instantly use them to interrupt the repetition of the bad thoughts that negatively affect the body [139, p. 531–533].

When you learn to master the technique of attention to your thoughts and art of converting them in the right direction, then you will feel an unprecedented surge of vitality, confidence in their abilities.

Eastern philosophy teaches: empty the mind of the endless chatter, endless images and successive desires. Then you will detect within yourself a calm, untroubled emptiness of mind with thoughts. At this time you are freed from the consciousness of habit-filled chaos of uncontrolled mental processes and their toxins. Many never "turn off" the work of thinking; they are like those who do not rest even at night. The emptiness of the mind contributes to the imagination when you can create the desired speculative experience, first illusory, which may then become a reality. The mind has to go beyond all experience, otherwise it will be a prisoner of its own projections, desires and aspirations, it will just be wandering in illusion. This can be achieved by only submission to the will of your thoughts.

As a protective mechanism of the brain can be considered forgetting of all anxieties, troubles, worries. Oblivion of negative memories will clear memory and normalize overall health. A properly tuned mind fills entire body with new sensations. A state of complete mental estrangement and saving void purify the mind. This is the vacuum of consciousness where manifestation of a new, positive experience is possible; this is a way to mastering the mental self-improvement.

*Exercises for learning to suspend thinking, to leave it without thoughts*

1. Lie down on your back and close your eyes. Relax your body and focus attention on your thoughts. Follow their progress unconstrainedly.

2. Stop thinking. Do not think of anything. Imagine a black square. Thoughts try to rush past it, and some will slip. Find them, return them into nothingness in the black square. Using imagination, watch everything going on in your inner eye, fix what is happening visually. Now you will see this black square. So you have gained a complete mental and physical relaxation.

3. You are "in the void" and give up your habits that are included in your flesh and blood. Your ideas are changing, the behavior pattern is breaking as well as the existing system of values, schematic thinking. You have made an evolution in your mind: learn how to work with your new thinking, subordinate your thoughts to your will.

4. Do not look for the truth outside yourself, look into yourself, and behold your true nature. Void is not a thing; without beginning or end, it is eternal, it cannot be destroyed. It has no extension in space. It is beyond comparison, it has no name, and it can not be measured. Once you do that, you are back at once in the world of old ideas and aspirations.

5. The stop of the thought is a vacuum of thought. A person does not think, reason is silent, inactive, the information is not received. This time he cuts himself from all that is happening, what is going on around him. He is temporarily immersed in a world of his existence, and he is resting. New sensations come and replace the old ones, acquired by the past.

6. To stop the work of mind requires constant training. It is gratifying to give peace to the mind and purification to the senses, tame unnecessary physical passions and dreams. The basis for recovery of the bodily organism is ignorance. Do not allow the mind at the time to think about anything, it must fall silent for a time and be under control.

7. Proper technique of self-emptying thinking from thoughts is necessary to purify the mind, because without this action there can be no upgrade. The mind must be completely empty in order to be open to new experiences. Purification of the mind must take place not only at its upper levels, but in its hidden depths. This is possible if the process of defining or creating concepts has stopped. When all levels of consciousness subside, become silent, only then there is a state of bliss, which shows the revival of creative constructive beginning.

8. Awareness without any choice of ways of the mind, this creator of the illusions – that is the beginning of your transformation. Only in solitude can come what has no reason to exist, only in the privacy is bliss. In the vacuum of consciousness, as if on a blank sheet of paper, you can write a new script of your thinking, it is possible to build a new world, a different experience, a positive thought, a new awareness of the creative life [139, p. 542–544].

#### ***1.7.4. The art of managing one's emotions***

One of the most common ways to get rid of excitement and nervousness is to take action. It is necessary to do anything but at the same time, having started a matter, bring it to the end. Another equally simple way to distract from anxiety is reading a book or watching a TV program. In this case, it is necessary that this occupation is so fascinating that you can forget about the subject of concern.

Physical effect on areas of the body that are responsible for the nervousness is also possible. There are several areas: first, the sexual excitation, and sex excellently reduces anxiety. In addition, the point of anxiety is in the temples two to three centimeters above the ears. Many people while worrying instinctively massage these points. Another pair is located right in the middle of the palms. Feeling anxious or undue anxiety, it is necessary to sit down on a chair, back straight and head slightly thrown back. You should close your eyes; and five to ten minutes of slow-motion massage of the temporal point clockwise.

After this you should make ten deep breaths, relax, lower your head and sit comfortable. Turning one hand palm up, you should strongly press on the point in the middle of the palm of your hand for about thirty seconds, and release it a few times to push again, but in short bursts. You can do the same with the other hand. In this case, make sure that the breathing remains even and deep and in any case do not count the time on the clock. Make slow count of time. This exercise will help you relieve stress and relax. Sometimes after this there can be a sense of sleepiness. In such a case it is better to go to bed. Sleep is a good assistant in the fight with anxieties and an effective way to relieve stress.

Currently, there are many psychotherapeutic methods of regulation of emotional states. However, most of them require specific individual or group lessons. One of the most affordable ways to improve the emotional state is *laughter therapy*. French doctor G. Rubinstein has grounded biological utility of laughter. It causes not very sharp, but deep shake of the whole body, which leads to the relaxation of the muscles and allows you to remove the tension caused by stress. In laughter breathing deepens, the lungs absorb more air, and the blood is enriched with oxygen, it improves circulation, calms the heart rate, reduces blood pressure. Laughter increases the allocation of endorphin, a pain-killing anti-stress substance, the body is relieved of stress hormone – adrenaline. Dancing has about the same mechanism of action.

However, the constant fun is the same departure from the realities of life as submergence in the dark emotions. And it's not just that emotional extremes can impair the health and well-being. The non-equilibrium of positive and negative emotions prevents from full communication and understanding. Gross violation of emotional balance does not benefit anyone, even if dominated by the positive emotional background. In this regard, one can draw a parallel with the influence of music on human emotions.

It is known that *music has a powerful emotional charge, sometimes more powerful than the real-life events*. Given this, psychologists use the method of music therapy for correction of emotional states. In disorders such as depression merry music only adds to the negative feelings, while tranquil melodies yield positive results. So in human communication, grief can be softened by compassion or aggravated by cheerfulness and inappropriate optimism. It is appropriate to remember here of empathy, the ability to adjust emotions to the "wave" of other people's experiences. Thanks to the empathy one can avoid the constant immersion in one's own joys and sorrows. An emotional world around us is so rich and diverse that any contact with it leaves no chances on a monopoly of positive and negative experiences. Empathy helps to balance a person's emotional sphere.



Strong emotional balance as an indicator of reasonably-controlled emotions cannot be achieved only by situational control of emotions. Satisfaction of man by his life, work and relationships with others is not equal to the amount of pleasure derived at any given moment. Like alpinist who experiences an incomparable sense of satisfaction at the top precisely because success has cost him many unpleasant emotions toward the goal, every man gets joy as a result of overcoming difficulties. Small pleasures of life are needed to compensate for the unpleasant experiences, but one shouldn't wait for deep satisfaction from their sum.

Short-term effect produced by the situational control of emotions, cannot lead to a stable equilibrium. This is due to the overall emotional stability of a person. It is considered that emotional people are different in that they take all to heart and react violently to trifles, and unemotional people have an enviable composure. Modern psychologists tend to identify with the emotionality imbalance, instability, high excitability.

Emotionality is seen as a stable personality feature connected with its temperament. The famous psycho-physiologist V. Nebylitsyn considered emotionality one of the main components of human temperament and singled out in it such characteristics as susceptibility (sensitivity to emotion influences), impulsivity (speed and rashness of emotional reactions), liability (emotional dynamics of emotional states). Depending on the temperament a person with more or less intensity is emotionally involved in a variety of situations. Features of the temperament are necessary to consider in a variety of communication situations. For example, there's no need to take offense at a violent reaction of choleric, which often shows rather his impulsiveness than a conscious intention to offend interlocutor. He can be answered in the same manner without risking a long conflict. But even a single harsh word can permanently unbalance the melancholic, a vulnerable and impressionable person with a keen sense of self-worth. Therefore, we must learn to understand the characteristics of emotional make-up of others. One should be able to control oneself, to keep balance no matter how intense their own emotional reactions are.

This option appears in the case of fruitless attempts at direct impact on the intensity of emotions a person goes over to the management of situations that arise and emotions are manifested. Emotional resources are not limitless, and if in some situations they are spent too generously, in others their deficit is felt. It is possible to concentrate all resources on one situation or in one area of life, but it's also possible to distribute them in many directions. In the first case, the intensity of emotions will be maximum. But the more emotional situations, the

lower the intensity of emotions in each of them. Thanks to this relationship, there opens the possibility to manage emotions in a more reasonable way than intervening in their physiological mechanisms and their immediate manifestations.

Thus, the overall human emotion is a constant (a relatively constant value), while the strength and duration of the emotional reaction to a given situation can vary greatly depending on the number of situations that don't leave a person indifferent [35]. Taking into account the law of constancy, one can learn ways to manage emotions that are aimed not at hopeless combating destructive manifestations of emotional extremes, but at awareness of the conditions of life and work that allows not leading oneself to them. It's about managing an extensive component of the general emotion – the emotion-developing situations.

The first way to control emotions is their *distribution*. It consists in expanding the range emotional situations which reduces the intensity of emotions in each of them. Distribution of emotion is the result of the expansion of information and the circle of communication range. Information about the new objects is necessary for a person to form new interests that turn neutral situations in emotional ones. The expansion of the circle of communication performs the same function, as the new contacts allow a person to find a wider field of manifestation of feelings.

The second way to control emotions, *concentration*, is necessary in situations where the conditions of emotion require full concentration of emotions on one thing, which is crucial in a certain period of life. In this case, the person deliberately excludes from the scope of his activity a number of emotional situations to increase the intensity of emotions in the most important of them. The most common technique is the restriction of the usual sources of information and the elimination of those activities that contribute to "spraying of emotions".

The third way to control emotions, *change*, is related to the transfer of experience from the emotion situations to neutral ones.

The use of these methods of management of emotions requires a certain global effort, ingenuity, inventiveness. Search for specific techniques depends on the personality and level of maturity. To get rid of unwanted emotions one has to learn to move from the role of an unwitting participant of emotional reactions to the role of the director, or indifferent witness, or at least to imagine oneself as an outside observer, trying to keep calm. There are various techniques [181, p. 46–50].

*Evocation of the desired emotions.* Evocation of inner feelings and outward manifestations corresponding to the desired emotions on the basis of feedback,

has an impact on your state and after a while (usually 5 – 15 minutes) you will be able to really begin to experience the desired emotions. It's like a part of the actor's art. In a quiet state it is quite easy to cause a certain emotion arbitrarily. But you need to have a good preparation to be able to vividly imagine and call in a stressful situation, when negative emotions literally engulf you, cram the whole being, the opposite emotion, "to fight fire with fire." To do this, there are simple exercises.

*Dissociation.* This method is intended for people who are bothered in life by excessive sensitivity and emotionality. In these cases it is useful to develop the skills of the removal of emotions – dissociation. This skill is based on the separation of perceived physiological changes in a person's own body, caused by emotions, from his easy internal mental state. To do this, it's necessary to learn to separate inevitably arising in the emotional situation physiological components of emotion, that is, bodily sensations, from mental. To put it simpler, distinguish emotions being imposed from the outside from one's intrinsic *I*.

*Transition to the neutral state.* Unlike the previous methods, this method of "neutralization" emotions is much easier to master. It does not require acting talent, for getting rid of unpleasant emotions is achieved not by imaginative representations of another emotion, displacing the original one, but is a clear technology associated with the transition to a neutral state of rest, repose, relaxation, in which generally any negative emotion has no place. It allows a person to extinguish an unpleasant emotion, affecting available to our influence vulnerability in its development – feelings connected, associated with one's own body. Monitoring of internal sensations associated with the emotion, allows us to separate from it, watching it as if from aside, and then remove it by influencing those feelings. Feelings can be managed using the following:

- focus (direction of attention);
- muscle relaxation;
- calming breathing (slow, abdominal, relaxing);
- awareness of subtle, subliminal sensation thanks to earlier conscious change in the threshold of sensitivity (e.g., a sense of "percolation of energy" in the body);
- halting the internal mental dialogue.

Mastering these techniques includes exercises for the development of practical skills according to the following five areas:

1. The development of skills of self-observation.
2. Practicing muscular relaxation techniques.
3. The assimilation of technology of "soothing" relaxation breathing.

4. Elements of bioenergetics

5. Meditation elements [139, p. 50].

Let's take a closer look:

1. *The development of skills of self-observation* is due to the fact that the person to control emotions needs to feel his own body, catch occurring in it changes associated with emotions. The fact is that the volume of our attention is very limited. At any time, we obtain a lot of information both from outside and from within, from our own body, to which we simply do not pay attention. A person often will not notice that he lives in his body. As for the modern man, he needs to learn to be aware of himself anew, that is to realize the bodily feeling in his mind. Experts recommend for this series of exercises, the purpose of which is to focus on what we got accustomed to for a long time, with the same curiosity as in early childhood, when we were just getting acquainted with our body, its internal language, not the language of words but that of sensations. According to Charles Brooks, for the man to be able to establish contact with his own feelings, he needs to regain the natural fullness of the natural feelings, peculiar to a small child.

Growing up, a person not only acquires life experience, but also, unfortunately, loses something useful: naturalness, spontaneity, openness, sociability, intuition and imagination, and, finally, the ability to enjoy life. However, he may for a short time "return to childhood" both psychologically and physiologically. It is this ability that is the basis of self-regulation activities. In this case, the basic skills of self-watching, tracking sensations is an important tool to mobilize attention, that in itself can serve as an effective contribute of control of emotions. The importance of being "here and now" can be illustrated by the well-known Buddhist parable. When a student asked a Zen Master, in what lays the meaning of the great Tao, the teacher replied: "In the simple common sense. When I am hungry I eat, when I'm tired, I sleep." – "But do not all do the same thing?" asked the student. To what the teacher replied, "No, most people are not present in what they are doing."

2. *Muscle relaxation – the removal of physical exertion and of emotional stress.* The relationship of psychological status and muscle tension has been studied for a long time. It is described in detail in works by American psychologist B. Jacobson, who found that a variety of psychosomatic illnesses and neuroses are accompanied by increased tone of skeletal muscles, which aggravates the condition of patients. In healthy people, the changes in muscle tone clearly reflect their emotional state. Thus, muscle tension is a stress indicator. The deeper the state of stress is, the higher the muscle tone.

Therefore psycho-muscle relaxation is a way of emotional discharge. We need only to remember the state of the body during relaxation. Appropriate mental representation of movement and sensation are necessary in the muscles, so that later, when calling from memory the habitual image, to be able to easily and quickly sink into the desired state. And one should use the skills of self-observation to highlight the finest shades, nuances of muscular sensations, staring at them from different angles, comparing with the already known so that it will help to remember them better. So, for the development of methods of relaxation it is necessary:

- remember the feeling of muscle relaxation;
- learn how to visualize the motion;
- remember the sequence of various muscle groups relaxation.

3. *Breath and emotions*. Breathing is the most important function of the body. The character of breathing (its depth, rhythm, etc.) depends not only on ensuring the physiological needs of the body in oxygen, which vary depending on the exercise. It reflects very finely the emotional state of a person and is a sensitive indicator, the lacmus test for emotions. Moving on from the breath characteristic of stress and negative emotions, being its integral part, to a different type of breathing, which is typical for a state of rest, a man can change his emotional state for the better. To do this one should learn to:

a) closely monitor his breathing, consciously understand it. Usually this process, like many others, is made automatically, and we are not accustomed to pay special attention to it;

b) support the abdominal breathing. It's very simple, but for some people it is a problem, since it comes to contradiction with their "breathing habits";

c) direct the breathing with the mind to the desired area of the body, achieving amplification or attenuation of physiological sensations associated with this area.

A way of calming emotions, finding peace and detachment from the bustle by means of breathing existed as early as ancient times. Apart from Buddhism, the various breathing techniques to achieve certain states of consciousness are used in many religious, philosophical and health systems. Not accidentally, the word "breath" in Russian is close to the words "spirit", "soul."

4. *Elements of bioenergy*. Since the concept of "bioenergy" entering modern life there go on debates in society about the legitimacy and reality of its existence. Perceptions of bioenergy are often associated with mysticism and parapsychology, and with superstition. All this is prevents the modern man from seeing some simple and natural physiological phenomena underlying the proven

age-old spiritual practices and health systems (yoga, Qi Gong), really useful and accessible to everyone.

Experience shows that when the sense of "energy" is distributed symmetrically in the body this corresponds to a comfortable state of health and optimal functional state. And on the contrary, according to the principle of feedback, purposeful creation in a body symmetrical comfortable feeling of "bioenergy" brings it to an optimum state. Hence, the practical importance of the physical phenomenon of "energy", especially is in the aspect of psychological self-regulation. Both breathing, relaxation and enrichment activities properly reconstruct the spatial distribution of the "body-energy" feelings, lead to the normalization of the nervous system and, consequently, the related regulation of the functions of internal organs, as well as the harmonization of the psychic sphere in general.

As a person by means of special exercise and psychotherapeutic treatments (influencing areas of chronic muscle tension to achieve their relaxation) in combination with the regulated deep breathing manages to remove the "muscle clips", "loosen muscular armor", many psychological problems are solved, including changing lifestyle in general. The person gets rid of chronic complexes, thus acquiring a sense of unity, of oneness with the world [139, p. 105].

5. *The elements of meditation* as a way to stop the endless stream of thoughts, incessant internal dialogue. This knowledge existed many dozens of centuries in Buddhism, in yoga schools, in Sufism, and in 1930 was reviewed, and brought up to date, Europeanized by J. Schultz in the second stage of developed by him auto-training. It was also used by G. Gurdjieff, our compatriot and esoteric, known throughout the world. An obvious wave of popularity of such methods has risen in the 1970s, especially in the United States; a period later called "the great metaphysical revolution," and does not abate until now. These methods are called meditation or controlled altered state of consciousness (ASC).

The use of such an unusual state of consciousness of "not-thinking" helps in the fight against stress. Along with the rest and relief of nervous tension, elimination of the problem of "being stuck" on unpleasant reflections, such sort of state of "mental pause" allows to overcome the limitations and inflexibility of conscious logic, to listen to the views of the subconscious, of one's intuition. Meditation allows the brain to relax, to feel the freedom, to breathe the free air of it, to listen to the silence, to see the empty, to feel its own immateriality.

In other words, the skills of self-observation, observation of feeling, serve as a means of distracting thoughts. As a result, one can feel a true calmness, it is

always present within us. It is necessary to only find it in oneself by listening carefully to their sensations, to their internal processes related both to the mind, and to feelings. The experience of this state of rest really makes it possible to know oneself, to listen to the voice of the subconscious, to access inner wisdom. All this helps to find a way out of a difficult situation, give a discharge to accumulated emotions, and get rid of annoying physical discomfort. This is the most effective means for stress and internal problems. Many modern researchers write about it.

Thus, the various ancient intuitive notions of various ancient spiritual, healing, and philosophical systems are quite consistent with each other, as well as with the views of modern psychology and psychophysiology. This applies to the three-element system of "spiritual energy centers". Most psychological problems arise because of one-sidedness, disharmony of personal development. Only proportional, balanced development in all its three dimensions gives a person psychological sustainability, based on the three reliable "points of support".

In terms of personal growth one has to consciously seek a harmonious combination of activity of all three centers for achieving a common goal. In the literature, this principle is called the "triad of success": on physical level – a direct action, on the emotional – the cultivation of positive emotions associated with the achievement of the objectives and maintaining confidence in success, on mental (intellectual) – positive thinking and figurative representation of the fact that the desired result is obtained (the techniques of visualization and affirmation).

#### ***1.7.5. The practice of psychical self-perfection as a basis of health-system***

The superiority of the spirit over the normal physiological functions is confirmed today, not only in practice but also as a result of modern scientific research. The interaction between body and spirit has become in recent years the subject of research in psychosomatic psycho-neuroimmunology. Psycho-neuroimmunology is primarily engaged in a group of conducting substances, the so-called neuropeptides (at present there are about seventy of them) that are produced by the brain's immune system and nerve cells of other organs. Scientists have found that an area of the brain that controls emotions has a larger numbers of receptors ("shelters") for neuropeptides. They discovered a very differentiated communications network linking together the mind, the immune system and other systems of the body. Through these means of communication our feelings, thoughts, and views can directly influence the body. For example, the mind through mental visualization can affect the defense system of our body.

Neuropeptides convert the contents of consciousness and feelings into the physical reactions; they are the physical equivalent of the senses and the thoughts. The results of the research in this area show that our entire body is an indivisible unity. That's why, experts who have discovered neuropeptides say about the system 'body – mind' of a human. Immunologic cells that are essential for our health, keenly perceive everything that happens in the heart and brain. So, one who is depressed, pessimistic, who gave up hope, and for whom life has lost all meaning "suppresses" his immune system and as a result becomes more susceptible to diseases. If a person, on the contrary, lives with faith in himself and sees the crisis as a challenge, he in this way wakes up in the healing powers in him and strengthens his own protective system.

There is such a thing as a "metaphysical causality," which describes the power of words and thoughts and speaks about the relationship between the nature of thinking, parts of the body and physical health problems. It turns out that we ourselves call unwittingly a particular disease. Among psychological factors that cause most of the body illnesses are, according to experts, fault-finding, anger, resentment and a sense of guilt. If, for example, a person is engaged in criticism for a long time, then he can often develop a disease like arthritis. Anger causes ailments, from which the body as if boils, burns, gets infected. Offense held for a long time devours the body and, ultimately, leads to the formation of tumors and the development of cancer. A feeling of guilt always makes us look punished and leads to pain. It is therefore much easier to give up of negative thoughts even when we are healthy, than to try to eradicate them after the occurrence of the disease.

Louise Hay has developed a list of psychological equivalents, made through years of research, and as a result of her work with patients as a psychotherapist [209]. The list is useful as an indicator of likely patterns of thinking that cause an illness. Furthermore, she offers a new way of thinking affirmations or positive assertions to be used for self-hypnosis. She is confident that our minds communicate all the time with the One Infinite Mind. Consequently, all knowledge and all wisdom are available to us at any time. She believes that we are connected with the Universal Power that gave us life through the inner spark of light, through our higher self or through the power within us. The Universal Power loves all of its creations. At its core is a good, bright beginning, and it controls everything in our lives.

The study by scientists of health provides an answer to the question of what psychic factors contribute to a disease. First of all, this includes external causes, the so-called critical life events. These include situations with high stress load and turning points in life like death of a loved one, divorce or unemployment.



Stress research has shown that a predisposition to a variety of diseases increases if a person's life suddenly makes numerous or significant changes. Internal loads associated with certain attitudes, personality traits and behaviors are equally conducive to disease.

A lot of examples show how feelings can cause radical changes in the body. Studies at Harvard University showed that the happier a person the stronger his immune system. Connection of heart disease with life situation, the restriction of blood vessels and blood clots with irritable, angry character has been proved. Respiratory diseases such as asthma are also caused by "emotional state." Now experts are looking for the connection between the emotional state and cancer. Recent studies have shown that laughter significantly increases the resistance of human to diseases.

"Anyone can have a good health and to be healed of ailments, if he is to stick to certain principles of life," says Charles Teutsch, who for many years has been the President of the Academy of IDEAL-method, an advisor of the National Federation of the United States to fight cancer, as well as a member of international societies [199, c. 15]. In America, journalists assigned Charles Teutsch a sounding title "a mentor of success." As a PhD in such distant areas as physics and psychology, he has managed to combine the results of research to develop his own techniques for solving personal and family problems, including the adjustment of health status.

The root cause of all disease, the scientist says, is negative emotions: fear, anger, jealousy, anxiety, frustration, regret and concern generated by the unsuccessful attempts of people to achieve happiness and meet the requirements of modern life. Illness is a distorted consciousness which has taken the form of an obsession. Life is very simple: what we do is what we get in return. Our thoughts and words, in which we clothe them, create our future. This is due to the fact that the process of thinking is made not only with the human brain, but with his entire body. Each cell has the smallest tiny glimpse of the consciousness, says Charles Teutsch. What the mind is thinking, body is thinking as well, and, as a result, it becomes what it thinks. Therefore, when the mind is changed, corresponding changes occur in the body, exactly reflecting the changes of thought. The disease itself has no power over the body, this is a consequence of incorrect understanding and use of the laws of consciousness.

On this philosophical basis as a result of years of research Charles Teutsch formulated four "health laws" which are so simple that are accessible to understanding of any person, namely:

1. Get rid of the roots of evil, envy and resentment.
2. Do not do anything that makes you feel guilty.

3. Be honest and do not be afraid to express your emotions if they do not injure other people.

4. And most importantly, make every day pleasant, enjoy every minute of your life, learn to feel the joy and beauty of existence on this earth [199, p. 40].

The harder life the more alarming the future, the more important to be able to find reason for joy and resist oppressive thoughts, anger and despair. Negative emotions only undermine health. In everyday life, avoid petty conflicts generated by an involuntary emotional reaction. Sharp, rough, and especially angry words increase the levels of stress hormones, including cortisol, nearly the most harmful of them. Like rust, it corrodes the cells of the brain cortex, impairing memory, impoverishing the emotional sphere, causing increased nervousness.

In this regard we cannot avoid mentioning the television. According to psycho-analysts now it is a serious threat because it pours down on human a flow of negative information. General recommendation about the TV screen is simple: do not watch everything, and it is better to give preference to those programs in which there is joy, beauty, love, laughter, something good and pleasant, and confine to them.

So, the first thing you need to do to be healthy and happy is to learn to protect yourself from negative emotions and negative information. The second prerequisite of enjoying life is to be able to find joyful moments in it. Start paying special attention to the pleasant things which you somehow come across every day. Then they will lock automatically in the subconscious, forcing out harmful negative information. And the feature of our psyche, as discussed above, will help to quickly develop this very useful habit. Another source of positive emotions is nature. Learn to see the beauty and harmony: the golden rays of the sun at dawn, an amazing range of colors at sunset, calming green of the trees, whimsical fantasy of "snow architecture" and much more.

There are many examples to prove the conclusion that the state of mind affects the patient's clinical outcome. Many miraculous healings can be explained only by the influence of the spiritual or physiological impact of the brain. Perhaps this is a natural phenomenon of self-organizing systems of our biological organism; the recovery process under the influence of a still unknown to science mechanism in the depths of the cell structure. It is launched into effect by the placebo effect, which is the omnipotent power of faith and expectation.

The word "placebo" in Latin means "to deliver satisfaction" and is a powerful, yet intuitive enough, healing effect. It is still a poorly understood process in which psychological factors such as belief and expectation launch a healing response. The placebo effect is probably the main factor in most therapies throughout human history. Expectation and beliefs are thus key forces

of placebo response. If the patient is unable to convince himself that the doctor will help him, and firmly believes in it, no treatment will bring him good. Faith and expectation of the patient, comprising the placebo effect are the first part of self-hypnosis, the power of which is immeasurable.

The influence of the mind on the work of a biological organism is a scientifically proven fact. The main mechanism that affects the psyche is mind. It can make the body sick. There are mechanisms by which the mind causes physical illness. From the point of view of the theory of vital force, more and more of its units from man's reserve are captured by the negative thoughts of the man himself. To improve the physical and mental state is possible if the negative emotional charge is released from the cell's memory block. And it is quite possible to do so by using the methods of psychic self-improvement. The return of survival potential and vitality increases in proportion to the amount of energy released from the information content of this memory.

Information approach to the problem of "mind and brain", which for many years has been developed by D. Dubrovsky, enables to speak about the possibility of constant expansion of the range of self-regulation, self-improvement and creativity. And this applies not only to the management of mental processes, but also to the management of bodily processes, a change in the existing contours of psychosomatic regulation (as experienced by yogis, abilities, and the phenomena of a number of prominent personalities).

Therefore, the main stage in human development is the intellectualization of the mind. It strengthens the impact of the analytical mind on the psyche, and, hence, on the work of the cell. Through this influence mechanisms that produce regenerative processes in a biological organism are activated. It is conscious mind that is the main link in the process of self-healing. Intense intellectual work of thinking involves the so-called "silent neurons" that control reserves of brain cells. As a result, there is an expansion of the structural and functional possibilities of the human mind. This is the strategy of evolution of consciousness and the direction to achieve mental self-improvement.

Opportunity to master the practice of mental self-improvement is given by self-knowledge. The goal of world religious practice is the development and acquisition not of external things, but the inner world of a person's mind and consciousness. Its ultimate goal is to deeply know its nature, to dissolve in it and through its direct experience to feel that it is divine. Various spiritual and cultural traditions express it differently, but the essence is the same. Christianity teaches us that "the kingdom of God is within you." Buddhism says, "Look into yourself, you are Buddha." Siddha Yoga says: "God dwells within you as you". And Islam: "He, who knows himself, knows his God."

We know nothing about our capacities. Few people try to turn on the light in the depths of themselves. In the field of human consciousness there is still much of unknown, especially about the way in which it comes in contact with itself. It is there that self-image that makes us what we are is created. Efforts are needed to achieve a true understanding of the world and ourselves.

To gain an understanding of one's mental and physical state is possible only in a state of attention that occurs when there is not only the desire but also the understanding of the ways to achieve it, that is, in the process of self-knowledge. The latter should be inextricably linked with the process of self-improvement. Only then can a desired become a reality. To this goal leads the only way: the replacement of the old thinking with a new, positive and creative one. Then there is a feeling the tide of vitality, comes awareness of new abilities, there is mental health.

The mechanisms of mastering the practice of mental self-perfection are:

- relaxation;
- focusing;
- management of thought;
- concentration of thought;
- creative thinking;
- the direction of the imagination;
- manifestation of positive energy;
- "erasing" of information traces (engrams) of painful recollections and experiences.

- intellectual work of the mind.

*The methods of mental self-improvement:*

1. Working with one's psyche. Directed experiences. Practicing self-control and self-possession.

2. Mastering the skills to manage emotions. Knowledge of methods of influencing the imagination and the senses.

3. Work with inner feelings: thoughts and images.

4. Getting into a special, extraordinary state of consciousness.

5. Self-knowledge of one's inner world.

6. Withdrawal of senses from objects. Stimulation of the activity.

7. Development of aspirations to gain emotional and sensual relationship with the world, nature, other people and oneself.

8. The right decisions, the right actions, the right living, the appropriate effort, the right thought, the right concentration [139, p. 520, 521].

The practice of mental self-improvement is the foundation of a health-system. It uses a variety of options of psycho-training, allowing developing a more flexible model of behavior, a psychological condition. Mastering the

technique of psychic self-regulation, self-perfection gives quick positive results. This system cures nervous disorders, helps to heal many diseases, improves health and mood, changes outlook on life, adds life energy and spiritual strength. With it psychological, emotional balance, communication culture are reached, there is an improvement of the moral qualities. Concentrated and calm state is able to govern a person's emotional and physical potency, it brings spiritual source into the single harmony of life.

### **Questions for self-control and verification**

1. Define the concept of "full human potential."
2. Expand the essence of the reserves of the human body.
3. What is the self-regulation of the psyche and what are its mechanisms?
4. What are the main types of self-regulation?
5. Uncover the nature of self-regulation by means of inflow of nervous energy into the brain.
6. What is the essence of self-regulation through respiration and changes in the environment?
7. Expand the role of imagery in self-regulation of a person's mental state.
8. What is the role of thoughts and words as a means of self-regulation of the psyche?
9. What are the mechanisms of relaxation?
10. What is the role of mental self-improvement practice in a person's health-improvement?
11. What are the mechanisms of mastering the practice of mental self-improvement?
12. Name the methods of psychic self-improvement.

## **1.8. Transformation of learning motivation of students and the role of the objectives in the process**

### ***1.8.1. The dynamics of the motivational structure of students***

The formation of learning motivation of students at this stage is an objective necessity, due to complex processes taking place in society, the responsibility of subjects of the educational process for the quality of training. To solving this problem the works of such scientists as N. Bondarevskaya, L. Bozhovich V. Vilyunas, S. Zanyuk, N. Klimenko, P. Luzan, A. Markov, A. Orlov, A. Rean, V. Salkov, V. Schadrikov, et al. have been devoted. However, the question of the possibilities and ways of development or formation of students' motivation processes is still open.

In the psychological and educational literature, questions of human motivation have been lighted reasonably enough, but the term "motive" has not found an unambiguous interpretation. *Motive is the incentive to an activity, bound to the satisfaction of needs, a perceived reason behind the choices of actions and behavior of the individual.* A need encourages a person's desire to act. Motivation is the feeling of lack of something that has a definite direction. It is a manifestation of the need and is focused on achieving the goals that are realized as a means of satisfying needs.

The basis of motivation is values which act as a powerful filter of reality perception. One of the main tools of experience comprehension is beliefs. They determine the value which we attach to the events and underlie motivation and culture. Our beliefs and values either support or suppress certain skills and behaviors. Values largely determine the goals we set for ourselves and that the meaning that we attach to their achievement. On this depends, ultimately, what our actions will be. Beliefs connected the values with the environment, behavior, thoughts, and our ideas. Being a product of the deep structures of the brain, they cause changes in key physiological processes in the body and are responsible for many of our unconscious reactions. Beliefs have a self-organizing impact on a person's behavior.

Formation of human motives is associated with the values, beliefs, as well as habits, feelings and character. On the basis of these theoretical positions N. Klimenko concludes that the motive is the integral way of organizing human activity, any of its motivation, determinants of which are both internal and external causes. It performs a selective, cognitive, need, urging, and content-regulatory-forming executive functions [83].

The activity is directed by many motives, their set an internal process of urge itself is called motivation. *Motivation is the process of mental regulation that affects the direction of activity and the amount of energy mobilized to accomplish it. It represents the initial phase of mental and physical activity.* The success of the activity is largely determined by the quality of people and their motives. Freud, who was one of the first to use the term of motivation in psychology, considered personality as a mediating link between motivation and implementation. He saw its functions in finding socially acceptable forms of implementation of hidden, often from the personality itself, motives.

The problem of student motivation is activation, stimulation, management and implementation of their goal-directed behavior. In other words, motivation of learning is a process of urging ourselves and others to activities to achieve personal goals and learning objectives. It is these processes that reflect the essence of the motivational and behavioral aspect of teachers' and students' activities.

The theoretical basis for the study of motivation is the approach proposed by L. Vygotsky, A. Leontiev, S. Rubinstein, D. Ouznadze and other psychologists. An analysis of their work has allowed identifying a number of common methodological and theoretical principles of the problem, namely:

1) this complex system contains components and structures that are in the inner unity and mutual mediation, it has a special meaning and internal organization;

2) this system has a procedural dynamics – there are motivational cycles, stages;

3) motivation itself is an element of a more complex activity meta-system analysis of the functions and mechanisms of which gives an idea of its contents;

4) it is a functional system in which affective and cognitive processes are interrelated and interdependent;

5) it is a "psychic system" that is a special kind of mental processes that regulate the activity.

Learning motivation is characterized by directivity, stability, and dynamism. Thus, in the works by L. Bozhovich and her colleagues on the materials of the studies of the educational-cognitive activity it is emphasized that motivation aligns into an hierarchy of motives, in which internal motifs associated with the content of activity and its fulfillment may be the dominant, or broad social motives related to the pupil's need for a unique position in the system of social relations. In the process of learning there occurs development of existing needs and motives, their replacement and original hierarchy appear.

It is quite natural that the diversity of human needs cannot be closed on learning activity. In it, he satisfies only part of his needs. But even this part undergoes a certain transformation, depending on the specific conditions and the form of their satisfaction. Therefore the process of formation of the motives of learning activity consists, first of all, in further disclosure of the capacities of learning to meet the learning needs of students in specific ways. Given below is the scheme of students' motivation and their [216] (Fig. 1.4.).

As can be seen, the whole class of needs can "manifest" through learning. At first they are not related to the activity and are implemented beyond it. It is only thanks to advances in the learning process that it becomes possible to satisfy them. And on this stage, the person's needs find their object in activity and, thus, the formation of the structure of educational motivation and its understanding occur. This process establishes a personal sense of activity and its separate aspects, that finds reflection in the nature of its implementation. This manifests itself in attitudes to academic success in the implementation of the specific learning activities, in their dynamics, tension and, ultimately, in the formation of specific psychological system of activities.

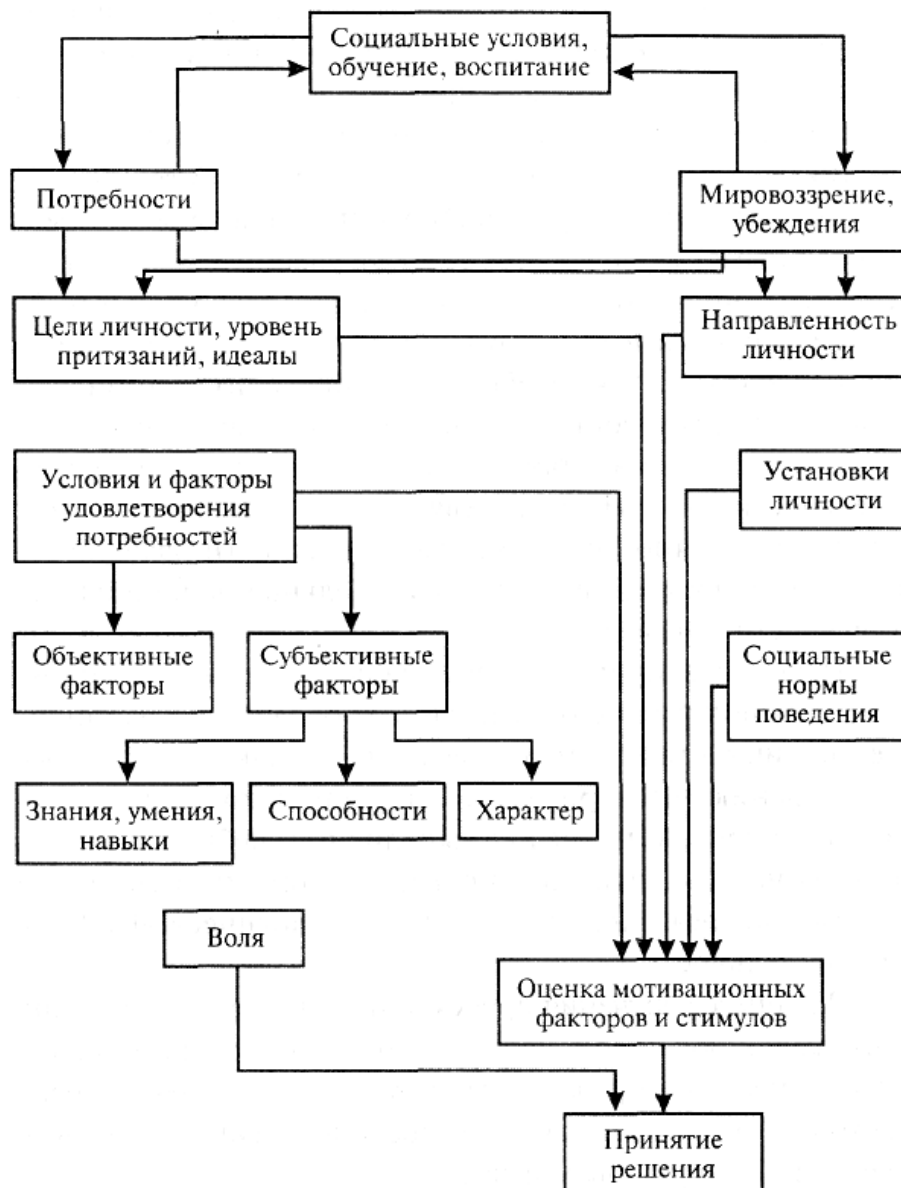


Fig. 1.4. Scheme of motivation and needs

In the course of the training a further development and transformation of the motivational structure of students takes place. This development goes on in the following directions: firstly, the general motifs are transformed into individual educative ones, and secondly, the change of level of education skills development causes the change of the training motives system, followed by transformation of teaching and cognitive motives into professional ones. It follows that along the whole way of training there are significant changes in the motivation sphere, which largely determine the success of the learning process. The critical moments in the genesis of motivation are the acceptance of educational activity and the disclosure of its personal meaning. At different



stages of learning various motives become leading. This phenomenon can be called the drift of motives.

A. Markova specifically emphasizes this point: "The motivation of learning is composed of a number of urges that are constantly changing, and enter into new relationships with each other (pupils' needs in and sense of learning, his motives, goals, emotions, interests). Therefore, the formation of motivation is not a simple increase in the positive or negative source, but the complication of the structure of the motivational sphere behind it, of urges being part of it, the emergence of new, more mature, and sometimes contradictory relations between them "[124, p. 14]. Accordingly, when analyzing the motivation there is a difficult task to determine not only the dominant motive, but also to take into account the whole structure of a person's motivational sphere. Considering this sphere regarding training, A. Markova emphasizes its hierarchical structure. In her view, the structure of training motivation includes needs of the training, the sense of training, learning motive, purpose, emotion, attitude, and interest.

Interest as one of the components of learning motivation is emotional experience of a student's cognitive need. The term "interest" is often used as a synonym for learning motivation. The opportunity and the need to create conditions for the emergence and forming of interest in learning were proclaimed by many researchers. According to them, the most important prerequisite for this is to educate the broader social activity motivation, understanding of its meaning, awareness of the importance of studied subjects for professional activities.

Results of the study by A. Rean illustrate well the fact that even the simplest analysis of professional interests, carried out timely, may affect the satisfaction with profession and its adequate choice. The causes of inadequate choice may be either external (social) factors associated with the inability to implement the occupational choice of interest, or internal (psychological) factors associated with lack of awareness of one's aptitudes or inadequacy of one's concept of the content of future professional activity and one's predisposition to it.

These individual moments, like the attitude to the profession as a whole, influence the effectiveness of students' learning activities. They have, in particular, the impact on the overall level of training. But there is also the inverse relationship: the attitude to the profession is influenced, of course, by a variety of strategies, technologies, methods of teaching, as well as social interests. Diagnostics of the attitude to a profession is not only a psychological but also an educational problem.

Its specific solution depends to a large extent on the joint efforts of a teacher and psychologist – both at the stage of career guidance at school and in the learning process. These efforts mostly come to the provision to an

individual of a competent psychological and educational assistance in choosing a profession. The task is difficult, but important and noble, for its successful solution will help a person avoid disappointment his future profession. The expected effect of psycho-diagnostics of motivation and associated with it personal-motivational choice is to reduce the number of students failing in choosing a profession, improve the process of mastering. Each applicant will be more responsible in choosing the future specialty, and thus the losses of the state because of its non-adequate selection will diminish.

No effective teacher interaction with students is possible without taking into account the characteristics of their motivation. Behind objectively same actions there can hide completely different reasons, in other words, the motivating power of these actions, their motivation may be totally different. The obvious effect on the success of training activities has the power of motivation and its structure. The motive can be characterized not only quantitatively (on a "strong-weak"), but also qualitatively. In this regard, internal and external reasons are typically allocated.

In this case we are talking about a motive for the content of the activities. If in the process of learning the cognitive need is satisfied, then we talk about intrinsic motivation. If other needs are significant (social prestige, salary, etc.), we speak of external motives. The external motivation themselves can be positive (motives for success, achievements) and negative (motives of avoidance, defense). Obviously, the external positive motifs are more efficient than the external negative ones, even if they are equal in strength.

In the range of problems associated with the study of the relationship of students to the selected profession should be included a number of issues related to the system and the hierarchy of motives that determine the positive or negative attitude towards their chosen profession. Scientists found that the positive high motivation can serve as a compensatory factor in the case of not high enough special abilities or lack of supply of required knowledge and skills.

It is known that different motivation affects learning features of the training sessions: the successes and failures of students with positive and negative motivation will be different. T. Levchenko conclusively shows that the subject because of his positive motivation is easier to be included in the training situation, quickly adapting to new teaching methods and individual teacher techniques. It is easier to achieve the desired results, he gets satisfaction from learning, his motivation is enhanced by it. Conversely, the subject with a negative motivation often evades training, works carelessly, not capable of hard work, does not reach the goal, non-initiative, quickly loses interest in the studies [109, p. 39].

Modern psycho-diagnostics has in its arsenal a lot of special techniques that can determine the types of motivation of the person under consideration.

Development of qualitative methods in general is a very difficult task, since the motives of activity and behavior forming the core of the personality, are "closed" for analysis, they make up a zone, consciously or unconsciously, but always carefully preserved by the personality from foreign penetration. And that is why the motivational sphere of personality is usually studied using sophisticated methods of the so-called projective type. Projective techniques are very time-consuming and, in addition, require the highest professional qualifications.

For the implementation of personality-and-motivational selection to universities for application of these methods it is necessary to organize their testing in a real motivational professional selection at several universities with development of options tailored for each institution. Thus, the diagnostics of motivation, proposed by V. Kovalev, is constructed from methodological point of view in such a way that allows using the assessment of motivation both separately and in combination with the existing selection rules [85]. For perfection of professional selection the possibility of introducing new indicators in the assessment of motivation is also provided for.

Professional interests are often shaped and determined by a mechanism of positive reinforcement. Successes of a student in some activities contribute to the development and fixation of his interest in them. A positive attitude can have no fundamental importance if it is not supported by competent representation of the profession and how to master it. Therefore the formation of a stable positive attitude to the profession is one of the most pressing problems of pedagogy and educational psychology, the development of which in modern conditions is becoming increasingly important.

Identification of occupational interests and aptitudes is an important predictor of satisfaction with the profession in the future. The success of training depends on this. V. Shadrikov noted that the accepting a profession creates a desire to do it in a certain way, gives rise to a determinative trend and is the starting point of the formation of the system of psychological activity [216]. The process of accepting the profession includes both the analysis of the motives, and the analysis of one's own abilities.

By now the studies have already been conducted which suggest that between professional interests and character peculiarities of individuality there is a certain connection. For example, scientists T. Kudryavtsev and A. Suharev found that students who show interest in the field of "man-to-man" (by questionnaire on professional orientation by E. Klimov), need more communication, work better in a group rather than individually. It can be concluded that the basis of professional directivity are not only conscious interests, but also the ability, aptitude, correspondence of personality's character traits to requirements of the future profession.

Theoretical proofs of the relationship of man and motives are reflected in dynamic psychology. Freud saw the character as a system of urges that defines the behavior, S. Fromm – as a relatively stable form of behavior, in which the human energy in the process of assimilation and socialization is concentrated.

Thus, behind the external representation of the qualities of the person hide the dominant motivations, certain methods of decision-making, developed plans and programs of behavior. And if we want to know what is behind this or that personality characteristic, the subject's motivation should be disclosed, his preferences, the criteria by which he is guided in his professional choice. This does not mean abandoning the current evaluation system of personal qualities by the dominant forms of behavior, but only emphasizes that they are also determined by other factors.

In connection with these ideas it is difficult to agree with the existing point of view of scientists, according to which the prediction of the future success of the profession should rely more on the personality traits rather than on the results of the diagnostics of professional interests. On the one hand, in fact, they are generally more rigid, than the interests. But, on the other hand, pronounced professional interests are often extremely resilient and always have a significant effect on satisfaction in learning profession and the success of future activities.

The researchers provided evidence that students' achievement is largely dependent not only on the natural abilities, but also on the development of educational motivation. Between these two factors, there is a complex system of relationships. So, at a high person's interest to a concrete activity the so-called compensatory mechanism may switch on. Lack of skills is filled with development of motivation sphere (interest in the subject, awareness of career choices, etc.), and the student is making great strides.

The dependence of educational activity success of the motivation was reviewed by G. Klaus, who found that the attitudes to training and its content make the most persistent influence on the process of active learning of the studied material and its success. According to him, a man with a strong desire to acquire knowledge is learning without external coercion to obtain satisfaction from the knowledge, showing persistency, showing intelligence, flexibility, imagination [82].

Thus, the ability and motivation are in dialectical unity and each of them in some way affects the level of academic performance. Studies carried out in universities showed that strong and weak students often do not differ in intellectual performance, but by the extent to which they have developed professional motivation. Of course, this but does not mean that capacities are not a significant factor in learning activities. This can be explained by the fact that the existing system of competitive selection in high schools, one way or another, makes a selection of entrants at the level of general intellectual ability. Those

who stand selection and enter the number of first-year students, are mostly able to study well.

It is of interest the students' estimation of various aspects of the learning process, content, forms, methods of organization, taking into account their individual needs and personal goals, which may or may not coincide with the goals of learning. Thus, N. Nesterov, analyzing psychological characteristics of learning and cognitive activity of students, divides the entire period of study into three phases:

- I phase (I year) is characterized by high level indicator of professional and training motives by which students are guided in the process of learning activities. However, they are idealized, since they are caused by rather understanding of their public than personal meaning;

- II stage (II, III years) is distinguished by general decrease in the intensity of the motivational components. Educational and professional motives cease to manage training activities;

- III stage (IV, V years) is characterized by the increasing degree of awareness and by integration of different forms of learning motives.

For an explanation of these processes it is useful to understand the overall structure of students' motivation for learning, which, according to scientists, includes such components [26]:

A) *Cognitive*. If the student in the learning process strives for knowledge, is satisfied that he has learned, realized something, mastered some skills, so he develops the motivation, the corresponding structure of the training activities. The man is enriched by knowledge only when this knowledge means something to him.

B) *Prestige motivation*, which is typical of students with overestimated self-esteem and leadership tendencies. It encourages them to learn better than their group-mates, to stand out, to be the first. If the prestigious motivation matches quite developed capacities, it becomes a powerful engine for the student's development who will be at the limit of its efficiency and hard work to achieve the best learning outcomes. Individualism, a constant rivalry with capable peers and neglect of others distort moral directedness of such people's personality. If the prestigious motivation is combined with average abilities, then the students with inflated level of claims often display violent reactions in situations of failure.

C) *The motivation for success* is a positive one. This person seeks to achieve positive results. Students with this kind of motivation set for themselves a major positive goal, the achievement of which is evaluated as success. They are actively involved in the activities, selected methods and looking for opportunities to achieve this goal. For them the full mobilization of all their

resources and efforts are concentrated on the achievement of the goal. Formation of sustained motivation to succeed is necessary in order to increase self-esteem and psychological stability of the student.

D) *The motivation of avoiding failure* is negative. With this type of motivation a student seeks, above all, to avoid failures, unpleasant consequences of their activities. He lacks prestige motivation, and motivation to achieve and get high scores.

E) *Compensatory*. This is the side-motives with respect to the training activities reasons that allow establishing themselves in another area – in sports, music, painting, caring for younger family members, etc. Such students are characterized by high self-esteem of their individual skills and abilities. Their lack of an inferiority complex and uncertainty plays a positive role in helping them to establish themselves in other activities, is the basis for development of educational motivation.

This classification was later supplemented by *the professional motivation* as a positive attitude to the profession is connected with the ultimate goals of education. If the student understands what kind of profession he has chosen and finds it interesting for himself and meaningful to the community, it will definitely affect the way his training develops. Studies in the initial vocational training system and in higher education, fully supports this position. Also important are *social motives, motives of creative self-realization, communicative*, and other motives.

According to the study the structure of a fifth-year student motivation of Technical University by the method of A. Rean and V. Yakunin, their priorities were distributed in the following order: communication, professional, educational and informative, prestige, social, creative self-motivation, and finally avoidance of failures. It is logical to assume that for the fifth-year students the dominant should be professional or educational-cognitive motives, and not communicative ones. The results suggest the need to examine the causes of this phenomenon, which seems to be related to the problem of selection for admission to the university and the prospects for future employment in the specialty.

Motives of creative self-actualization on the results of this study occupy the fifth place. Perhaps during training students were not enough involved in the different types of creative activity, which supposes, firstly, the active participation of students in research work of the institution, in a variety of other forms (conferences, abstracts, reports, forums, participation in competitions and grants, etc.), and secondly, the use of problem-based learning methods, the basis of which is independent solution of conflicts between students' existing knowledge and new situation or tasks that arise in the educational process.

Expectations and the search for creative elements in future trade induce a special attitude to it. Notably, regardless of the specific and content different

professions create unequal opportunities for creativity. However, as rightly pointed out by B. Lomov, creativity is not necessarily related to the artistic, scientific and research work. Each activity has elements of creativity, and their appearance depends on the personality and of its relationship to the occupation. Generalized characteristic of student motivation is their satisfaction with their choice of profession. This is an integrative indicator, which reflects the attitude of the subject to his chosen profession and is an exceedingly important for its development. Low satisfaction is in most cases is the cause of poor academic performance of students later on, and even expulsion from the university. High levels will promote effective learning and achievement in the future a high degree of professionalism. The satisfaction with the chosen profession largely influences mental health. Thus, the study of satisfaction with the profession and its impact on the learning process, revealing in this area of certain patterns is an important task of pedagogy and psychology.

A study of this problem on materials of various Russian universities found that most pleased with the chosen profession were the first-year students. But during all the years of study, the rate fell steadily until the fifth year. Despite the fact that shortly before the graduation was the satisfaction with the profession was the lowest, the attitude itself to the profession remained positive.

In this regard, the authors conclude that, there is apparently no need to overestimate the utmost satisfaction with chosen profession in the first year. First-year students are based, as a rule, on their ideal concepts of their future profession, that when confronted with the actual conditions undergo painful changes. Obviously, the formation of students' real notions of their future profession should be a subject of teachers' deliberate efforts. A necessary component of this process is a reasonable explanation of the meaning of certain general subjects for future practice.

Satisfaction with the educational activity increases with the complication of the subject, increasing the share of creative components that enable the student to show personal initiative and implement his knowledge and skills. With further personal growth, he begins to see the road to self-expression, self-actualization in activity. For example, the need for prestige, recognition, achievement and enhancing the status are determined by academic success. Educational failure can lead to the formation of negative motivation. Despite the fact that the satisfaction with the profession is due to many factors, it lends itself to the level of probabilistic forecasting. Obviously, the effectiveness of such a forecast is defined by a set of techniques that will be applied to study the dynamics of students' learning motivation and its transformation into the professional one.

The structure of students' motivation during training at universities is undergoing changes and has its own dynamics from course to course. The most complete dynamics of learning motivation provides the theory of staged

formation of new actions (P. Galperin, N. Talyzina, V. Davydov, A. Markov, et al.), in which both the "problem" and "I-involvement" of personality in learning activities are considered. An attempt undertaken by us to conduct theoretical analysis of this teaching has identified the following psychological conditions providing motivation of learning at every stage of acquisition.

According to scientists, during the first stage, organization of students' "I-involvement" and problem involvement (G. Allport) are of utmost importance. To ensure self-involvement of students it is necessary to take into account the proximal development zone. (L. Vygotsky), perspective of the lines (A. Makarenko), which are disclosed to a person through life.

An important role in self-involvement plays an adequate perception by the learner of the ultimate goal of assimilation (P. Galperin, D. Bruner, T. Gilbert, C. Hull). Problem involvement is ensured by the tasks put by using the usual questions (D. Berdayn) dismissal of the customary practices of the past (K. Stanislavsky), using the whole arsenal of formulation and solution of the problems accumulated in the process of problem-based learning (A. Matyushkin, M. Makhmutov, etc.).

At the stage of development of the scheme of orientation in the objective conditions and constructing models of actions, a great motivational effect gives discovery by students under the guidance of teacher of the significance of the studied subjects, the need for a creative approach to further use of acquired knowledge. This allows to develop research abilities of students, to achieve success in performing acquisitioned actions, and in the future to transfer creatively these skills to a wide class of new theoretical and practical problems.

On the stage materialized action motivating influence exerts assimilation of knowledge in the application (when solving problems), and developed earlier scheme of orientation and preparing a plan of action ensures their careful control and self-control. Success removes such negative emotional states as fear of lack of success, inadequacy-affect, mental fatigue, etc.

The stage of verbal discussion of the material requires a deep awareness of it in the course of communication with peers and teachers, participation in discussions, performances of different roles in the process of training sessions, the use of case method, etc.

Stage of mental action motivates the inclusion of the assimilated material into new activities, where it is converted into either intellectual skill, pure thought (P. Galperin), or by attaining the personality sense for the student, can turn into an independent activity (A. Leontiev, N. Kuzmina).

In line with the theory of gradual formation there have been conducted a number of experimental studies of transformation of learning motivation and education of cognitive interest in academic subject. They can be grouped into four areas:



1) the dependence of learning motivation on the organization of activities of teachers on the formation of satisfaction with learning (N. Alfimova, L. Lipchanskaya, A. Karpova, N. Kostjukov, N. Pryazhnikov, et al .)

2) the dependence of learning motivation on the personality characteristics of students and their involvement in the educational process (G. Abramov, G. Butkin, G. Kisluk, etc.;

3) the dependence of the motivation on the organization of collective combined learning activities (V. Rubtsov, G. Kravtsov, G. Zuckerman et al.);

4) Research of polymotivation of learning activities (A. Markov, V. Liaudis, V. Zaleski, A. Meshcheryakov, V. Shabel'nikov, et al.), trying to combine all of the above aspects.

Any human activity is polymotivated: within him can coexist proper cognitive motives, professional achievement motivation, prestige, and others. Shaping of cognitive motives can play an important role. Their saturation leads to positive emotions, improves the level of activity of the person and the effectiveness of training. Interest in knowledge and methods of practical action, positive emotional attitude to employment, the desire for a successful learning and other manifestations of students' involvement in learning activities depend primarily on cognitive and professional motives. Initial needs and motivations may change under the influence of the content and the learning environment, the transformation of cognitive motives into professional ones.

### ***1.8.2. Transformation of students' learning motivation into professional motivation of future specialists***

The main problem of vocational education is the transition from the learning activities of students to the development of their professional activities. This transition is, first and foremost, through the transformation of the cognitive motives of the students into the professional motives of specialists. *Professional motivation of students is understood as a set of changes that occur in the minds of students and encourages formation of his readiness for successful professional activities.* It is decisive for the development of his professional and personal qualities, which can be a base for effective self-realization in future. Forming of professional motivation depends on the extent of how much a student wants to be come a specialist, see ways of self-expression, actualization in activity.

According to the view of scientists V. Yakunin and N. Nesterova, establishment of a future qualified specialist is possible only under condition of having formed motivation-value attitude to his professional activity. Researchers have established a positive connection of motivational orientations with subjects' of study successfulness [224]. The most effective is the professional

directedness which is characterized as an interest to a specialty, a desire and ability to be engaged in it, motivation of success achievement. Orientations on process and the result most of all influence learning successfulness; a less obvious influence is made by orientation on the teacher's mark. The connection of the "avoidance failures" orientation with successfulness is not manifested.

Yu. Orlov has established that the achievement motive to the largest extent influences academic performance. A similar result has been obtained in the research by L. Gren'. The author has come to a conclusion that achievement motivation is a dominant in formation of directedness on successful professional activity. It organizes students' wholesome behavior, enhances their personalities' growth, influences the goal-setting and the selection of ways to achieve them, favours their self-realization. That is why that student will be active in professional learning who realizes the necessity of knowledge, qualities, and abilities for successful professional activity. On this basis forms his motive of success achievement, ability to set goals and achieve them forms, which gives him an opportunity to adapt successfully in society.

Provisions of the activity approach to the research of motivation as a pedagogic activity enable to view it as a system of uninterrupted psychic components included into learning-and-cognitive activity and determined by peculiarities of its organization. The learning activity is determined firstly, by the very education system and the education institution; secondly, by the organization of the learning process; thirdly, by the preparedness of the teachers and learners; and, fourthly, by the specifics of the subject.

In accordance with the general psychological theory of activity, acquisition of the social experience takes place not by information transmission, but in the process of a person's own activities (S. Rubinstein, L. Vygotskiy, P. Galperin, V. Davydov, et al.) Through activity takes place not only acquisition of social experience, but also development of a person's psychic functions and abilities, his system of relationships with the world, other people, and oneself. The founder of the activity theory A. Leontiev wrote that a research of an activity demands analysis of its internal system links.

From the scheme (fig. 1.5) it is seen that all the elements of activity are interconnected; thus changes in the goal will lead to certain changes in other elements, to system effect. This enables a teacher by means of creating psychopedagogical condition to help a learner in systematic mastering professional activity. It is favoured by the context teaching which together with other kinds of teaching will to the full extent provide transformation of a student's learning activity into professional one.

The general structure of activity can be shown as a scheme (Fig. 1.5).

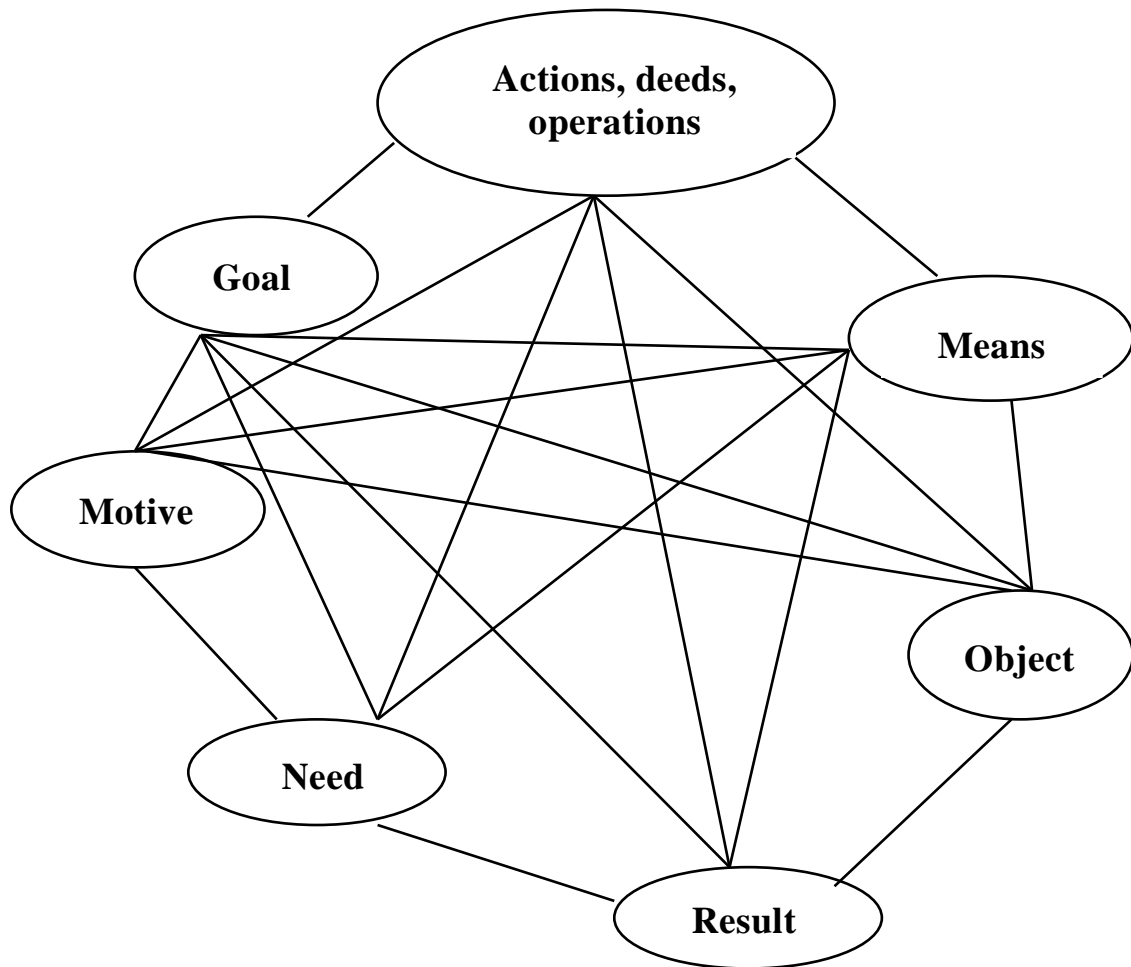


Figure 1.5. – General psychological structure of activity [31]

Within the context teaching A. Verbitskiy marked out three basic forms of student’s activity and many intermediate ones, transitional from one basic form to another. To the basic forms pertain: learning activity of academic type, the classical example of which is an information lecture; quasi-professional activity, an example of which is gaming; and learning-and-professional activity when a student performs real research or practical functions as those happening, for instance, during field study.

As intermediate kinds there are particular forms of teaching students, in which to a larger degree are manifested (by aims, content, and forms) qualities of specialists’ professional activity and which provide transition from one basic form of students’ activity to another. These are problem lectures, seminars-discussions, group laboratory-practical classes, analysis of specific production situations, special courses, etc.

In the teaching activity of academic type there is mainly reproduced the procedure of information transmitting and perception. But even here, at a problem lecture, or at a seminar-discussion contexts of future professional activity take shape: specialists' actions are modeled, theoretical and practical questions and problems are discussed.

The essence of quasi-professional activity is re-creation in the auditorium of conditions, content, and dynamics of industrial processes, and relationships of the people engaged there. Thus, in a game, which remains a form of auditorium lessons, there is re-created by means of imitation and game model the object, social, and psychological content of a specialist's work, wholesome content of his work is set.

In the forms of field study (practice) students by taking part in scientific research, doing industrial practice, preparing semester-papers, graduation-theses, diplomas on field study, etc., remain in the position of learners, and at the same time, according to the goals, content, forms, process, and requirements to the obtained results, they are in the specialists position. Here students model, in fact, a real professional activity in which the earlier obtained knowledge acts as an orientation basis.

In accordance with the theory of activity, transformation of one kind of activity into another, takes place mainly along the lines of changing its objects and motives. The object of student's activity in context teaching transforms from learning information (in the proper learning activity) into modeled situations (in the quasi-professional activity), and further on, to real production situations (in learning-and-professional activity). In this process students get within these basic forms an ever more evolved practice of using learning information as means of regulation their own activity. This ensures a young specialist's "natural" entry into profession without durable difficulties connected with object and social adaptation at an enterprise.

Development of cognitive and professional motives is conditioned by dynamics of evolving of content of students' activity – proper learning activity, quasi-professional, and learning-and professional ones. Interaction of cognitive and professional motives stipulates resolution of the main contradiction between the motivation basis of the actual learning and future professional activity of a student. The main goal of professional training is not acquisition of knowledge and skills by a student, but systematic mastering professional activity, general and professional personality development of future specialist. Along with knowledge and skills he needs to master experience of professional activity, and social relations experience.

The content of scientific knowledge is represented in the context teaching, as in any other, as learning information. But alongside with it, in the process of study there comes into sight the shape of a student's professional future. This

fills his cognitive activity with personal meaning, creates possibilities to set and achieve goals, for transition of his activities from learning to labor. All this motivates his learning activity, makes it conscious and productive.

Such dynamics of studying motivation demands further transformation of learning motivation into professional one considering psychological patterns of “shift of a motive to the goal” (A. Leontiev et al), “goals-setting” (O. Tihomirov et al), and “setting fixation” (D. Uznadze et al). It is on this way that is possible to make the most significant contribution into the problem of transformation of student’s learning motivation into professional one.

Thus, transformation of student’s learning motivation into professional one of the main components of teaching-and-educational process and connected with students’ goal-setting. Thanks to setting concrete goals, a student can better organize his activity and to plan his work connected with mastering future profession, to define the content of his and teacher’s activity. This will increase students’ activeness and enlist his efforts for independent work.

### ***1.8.3. Interrelation of motivation and aims of the students.***

A person’s behavior and his activities are directed at gaining the set goals. It is achieved by means of realization of the nearest and long-term goals. Only a long-term goal imparts meaning to human life. It must necessarily demand hard work through life. This goal demands from a person a complete exposure of his abilities, brings a feeling of self-assurance and complacency of life.

A consciously accepted goal is usually included as an obligatory element into motivation concepts of well-known psychologists. As S. Rubinstein supposes, *goal-setting is a highly conscious phenomenon, one of the fundamental peculiarities of human as a reasonable creature.* Reflecting the mind’s activity and determining the character of a person’s actions, as he thinks, goal-setting integrates into a whole the structure of regulatory processes and determines the fact that one particular act is being made, and not the other [177]. The consciousness of goal-setting is also stressed by A. Leontiev. He states that motives obey objective logic of tasks and lose the role of primary source of activity just on account of shift to conscious goals [112].

T. Shitabuni also believed that motives create goals, they are absent at first, and appear only when an obstacle arises, when it is necessary to perform a task. According to him, motivation theory cannot ignore the fact that people apply effort to gain a goal which they consider important for themselves. A thought about realizing difficulties on the way of achieving a goal was also expressed by D. Uznadze.

In the process of activity’s motivation it is important to understand the connection of a goal and a motive. It is very important to impart personal

meaning and interest to tasks set from the outside. As a result of “switching on” of certain needs and personal motives a goal acquires an autonomous impulsive strength and becomes a motive-goal. Goals, unlike motives, are consciously realized, i.e. a person understands why he sets for himself a certain goal, realizes distant results he strives to achieve. And a motive is usually not consciously realized. As a rule we don’t realize what causes us to act.

*A goal is a realized, pre-planned result of an activity, a subjective image of what we are striving to achieve.* A goal organizes, causes a person to act, stimulates to applying corresponding efforts to gain it. General goals till they are specified, often have declarative character and don’t cause to act. To a larger extent we are caused to act by close goals. When there is a specific and close goal the temptation to put it off for the future is weaker. As A. Leontiev stated, a large-scaled activity stipulates consecutive gains of specific goals. The more differentiated the final goal and the more stages and specified intermediate results have been planned, the easier it is to work. Achievement of a certain intermediate result creates a situation of success, gives an emotional charge, causes to gain the final goal, strengthens a person’s motivation to act. That is why defining intermittent goals has a considerable motivation importance.

Conscious realizing a goal lies in clear understanding of:

- future result of the activity;
- perspectives connected with the goal achievement;
- side-effects and consequences;
- possibility or impossibility of the goal achievement;
- hierarchy of the goals, i.e. which goals are more important, and which are minor;
- relation of the goals to abilities (easy and difficult goals);
- relation of the goal to the previous result;
- the means of the goal achievement.

Concretization of the goal, development of intermittent goals (stages) and of means to achieve them is an important motivation factor. The more motives determine a goal, the more it urges to actions. A goal substantiated with a few motives influences students’ behavior stronger. Teachers knowing which motives determine students’ desire of getting good marks can successfully govern their learning activities. By additionally actualizing the motives of self-assertion and self-development they can increase the goal’s motivation impact.

The meaning of the goal in learning-and-educational work was stressed by many scientists. Ya. Komenskiy said, “To the goal turn you all attention more than to the means.” [89]. And K. Ushinskiy spoke about the same point, “If we want to reach any goal in education we must first of all understand this goal.” [205]. A. Alport, thinking about continuous development of personality, speaks about motives generating a system of goals directed to the future. The

perspectives of personality's establishment fixed in such aspirations are its most important characteristics. Psychoanalysts often proceed from the idea that a personality's essence is determined by its past. But in fact, he writes, for real understanding of personality one should address to what it can become in future, because its every state is more often focused in the direction of its future possibilities.

For effective goal-setting a student should realize the significance of the goal, ways and stages of its achieving, possible difficulties in this process and ways to overcome them, the necessity of self-control. Goal-setting is first of all accepting and keeping the goals set by another person in mind, and, secondly, independent setting of goals. In order to govern the process of goals-setting it is necessary to know the pattern of a person's goals and his peculiarities. For effective goal-setting one must realize the following:

- 1) significance of the goal;
- 2) means of its achieving;
- 3) stages of its achieving;
- 4) possible difficulties and ways to prevent them;
- 5) necessity of self-control.

A personality that sets goals to itself is on a higher level of development than the one accepting goals imposed by other people. The ability to set goals and work on their achieving indicates a person's being capable of self-educating and self-development. It is known that the goal set to oneself independently creates a positive mood and is kept in mind longer. If a person sets oneself a goal independently he will work on its achieving much more than in the case when a goal (a task) is set by other people.

A goal set from the outside causes lesser activity of a person and has a lesser stimulating strength. It does not often become his own aim and in the process of work can be easily changed or even postponed in time. A person does not always accept such a goal automatically and tries to achieve it. Transformation of the outer demands into individual goals is one of variants of goal-setting. For an outer demand to be accepted and become a student's intention his participation is needed not only in goal-setting, but also in analysis, discussion of conditions of its achievement. In this case, a student will act not as a passive executive, but as an active participant that will contribute to his greater involvement in the work, and his greater activity.

It is known that the closer the goal the higher the subject's motivation and activity level are. When it is little time left before the exam students are inclined to work more intensely and insistently. And when it is still a long way to the finish-line, the force of motivation is, as a rule, not great. So, in the context of the problem of motivation strength influencing the activity effectiveness one should take into account the time factor (the goal's distance in time). It is

possible to assume that when there is much time before the work's completion, motivation is not optimal. Thus, the time proximity in itself is a stimulating factor. And on the contrary, time distance of a goal explains insufficient effectiveness of motivation's influencing activity.

Clear identification of the goal of activity leads to an exceptionally high motivation effect. If the desire for success is not persistent and strong enough this predetermines prompt refusal from intense activity. Often first positive results become noticeable only after a certain period of time. Even for inconsiderable success one sometimes has to wait for quite a long time. Most people count for quick success, and the process of activity brings them little satisfaction. For long-term motivation it is not enough to have just an attitude to the result, enthusiasm for the activity is also needed. Impatient desire to achieve an immediate result is a considerable drawback of many people.

While reaching a goal it is important to mark even insignificant intermittent results, progress, positive changes in work. To strengthen motivation for work, increase activity it is necessary for a student to realize clearly what he can do and what is necessary to do to reach the desired. Orientating on the previous results of activity it is possible to plan what should be studied additionally, what hasn't been acquired yet and which goal hasn't been reached yet. The possibility of quantitative evaluating the results of work (in points, per cent) makes the evaluation easier and causes a desire to improve the previous achievement.

In a specific cycle of the learning process the goals of learning are defined on the basis of the program requirements, taking into account the peculiarities of the student body, of their level of preceding preparedness, training, education, and self-development, as well as considering the possibilities of the teacher himself, availability of equipment for the teaching process. Also students' personal goals defining the motives of learning should be considered as well.

The results of a research conducted at technical university show that goal-setting is paid not enough attention. That is why only 22.4 % of students have long-term goals for up to three years, 32 % – intermediate ones (up to one year), and 57.6 % – short-term ones (from 1 to 3 months). To the question “Do you know how to make goal-setting?” the positive answer was given by only 20.8 % of students [129]. To activize fifth-year students' goal-setting they were delivered a special course “Psychology of gaining success” which included a lecture titled “Goal-directed personality behavior” in which questions concerning the study of the facts influencing deliberate behavior as well as strategies and tactics necessary for goals-setting and their achievement were recounted in detail.

Besides, when making a program of self-development and self-perfection in the end of the course study, students had difficulties at choosing specified directions of their self-development and ways and means of self-perfection. This



indicates their insufficient preparedness for goal-setting and choosing ways to achieve them, i.e. for the work on oneself. Such information should probably be included into the learning plans and programs of the higher education institution of junior years of study that will enable to prepare them for independent work which has been recently paid ever more attention. Also, a wider psychological training of students is necessary as well as specific methodological help of teachers on students' self-development and self-perfection.

This is facilitated by the use of the "portfolio" technology. Many authors think that in the work on portfolio a very important factor is interaction between the teacher and learner in the process of which goals of the work are set and evaluation criteria are developed. It is important that these goals the evaluation criteria be determined on a contractual basis, that is be an object of their mutual discussion.

The initial point of the work with portfolio is setting a question or of an open problem, formulating a problem. Portfolio itself is an indicator of the achievement of goal set to oneself. It is important that the aims of the work formulated in the process of discussion between the teacher and the student should be open and clear. The goals should be connected with the interests of the learners and fixed in the written form.

The written form of the learning goals serves for the students, on the one hand, as a goal post and help in systematic advancement to reach it, and on the other hand, as a basis for consequent self-evaluation, and evaluation by the teacher. After the goal is realized and fixed in writing, collection of material for the work begins. The activity process becomes evident for an outside viewer. The variety of documents and that of collected information is a considerable characteristic of the portfolio's quality.

Realizing the goal (of its difficulty, availability of means, one's abilities) increases the possibility of gaining the desired result, strengthens students' motivation and their activity. Having mastered the strategies and tactics of setting goals and achieving them, students feel satisfaction from the gained result. Psychologists state that the extent of satisfaction got at achieving a goal influences human behavior in similar situations in future. It is known that people try to repeat the behavior which is associated with satisfaction of a need, and avoid the opposite. This fact is known as the law of result.

The clarity of goals of the teaching and educational work facilitates the defining and creating necessary pedagogic conditions for their implementation, as well as use of effective ways and means of their achievement. In this connection it should be noted that each higher education institution should clearly define the tasks of theoretical and practical training of students, correlation of general, fundamental, and specialized education in forming their

personality, as well as create pedagogical conditions necessary for successful transformation of learning motivation in professional one.

While defining the goals of the learning it is necessary to proceed from the fact that the educative function of learning first of all presupposes the acquisition (perception, realizing) of scientific knowledge, forming of general and special skills. Scientific knowledge includes facts, ideas, notions, laws, patterns, theories, the generalized picture of the world. Special knowledge and skills are specific for only the corresponding subject or branch of science. Apart from them students in the course of training master general skills which have relation to all the subjects like work with books, reference materials, catalogues, effective reading and writing, practical skills of rationally organized individual learning activities, etc. Such a variety of the goals of teaching should be somehow structured.

Thus, setting of specified goals enhances increase of manageability of the training-and-education process. It is important that in the learning plan, the plan of educative, scientific, and culture work, in goal-sets of subjects and individual lessons there should be provided the setting of specified tasks aimed at self-knowledge, self-development, and self-perfection. Thanks to specific goals it is possible to better build the activities and pan the whole system of training at higher education institution, to define the content of the joint activity of teachers and students directed at increasing students' preparedness for professional activity.

### **Questions for self-control and verification:**

1. What points are the theoretical basis for the study of motivation?
2. Provide the definitions of the notions of "motive" and "motivation".
3. Define the structure of the motivation sphere.
4. What role does the interest to the profession play in learning?
5. Is there a connection between professional interests and characterological peculiarities of students?
6. What is necessary for diagnostics of motivation?
7. How does transformation of students' motivation structure take place?
8. Provide definition of the notion "professional motivation".
9. Does success of learning depend on motivation?
10. Describe general structure of students' motivation.
11. What is the theory of consecutive formation of motivation?
12. What is the role of a goal in the process of motivation formation?
13. Provide definitions of "goal" and "goal-setting".
14. What is necessary for effective goal-setting?
15. What is the role of context learning in transformation of learning motivation into professional one?

## **1.9. Motivation of achievement and its formation**

### ***1.9.1. The main directions of studying achievement motivation***

Educational and cognitive motives cause the student's desire to obtain not only the full amount of knowledge, but to achieve success in life. Being a motivated student is to make efforts, and for this it is necessary to believe that spending strength is a necessary condition for achieving the desired result. It also means that he has a motivation to achieve. Focusing on the student as the subject of teaching and educational process in the framework of a student-centered approach involves the creation of favorable conditions for the development of his needs, interests and intentions. This suggests that, with the subject-activity approach to teaching students the important role played by motivation to achieve.

*Achievement motivation is a desire of success, of high results of activity. It organizes a holistic behavior, increases learning activity, influences the formation of goals and the choice of ways to achieve it.* It is known that the person who strives for success, has a strong motivational of achievement. Its development is associated with an active lifestyle, formation of behavior model oriented to the successful achievement of the goals of activity. Having mastered the modern theories of motivation, the teacher will be able to greatly expand his capabilities in attracting students to carry out tasks related to the objectives of vocational training.

It is human nature to explain to oneself the causes of the phenomena the objective reality, of their own actions and those of others, that is, produce their causal attribution. "Questions about the incentives of actions and their results are asked not only in the study of motivation. They interest any person and are commonplace. Each of us, to some extent, is a psychologist in the field of motivation forms of day-to-day activities. Everyone wants to know what and why occurs around, especially if certain events directly affect him", writes H. Hekhausen [208, p. 615].

In his view, the theory of attribution is intended to clarify when and who, in relation to whom did something, what for and why he did it. Its subject is how a person comes to a particular conclusion, which information he uses, how he processes it, and how exactly the cognitive attribution of causes of whatever feelings and behavior is made. The absence of a unified theory of attribution and its peculiar set of instructional techniques is associated with the variety of ways of understanding reality by humans. There are a number of theories that describe and explain the phenomenon of causal attribution.

American scholar B. Atkinson, one of the first to offer a general theory of motivation that explains the behavior of a person, based on achieving high

goals. This theory has become one of the examples of symbolic explanation of motivation. The facts adduced as a result of numerous researches indicate that achievement motivation is an important and independent kind of human motivation. It affects the success of his activities in the community. It has long been observed that people with a strong desire to succeed, achieve in life significantly better results than those with whom such motivation is weaker or absent altogether. It is an interesting question about the reasons for these differences and the mechanisms of their actions.

Motivation to achieve is one version of the motivation of action manifestation related primarily to the person's preferred orientation on achieving success or avoiding failure. In the meaning of psychological terms, it is a kind of "key" to understanding the nature of the level of aspiration, desire of a higher self-evaluation, taking by an individual of responsible decisions and regulation of his activity.

Motive to achieve has been studied the best in foreign literature. G. Murray included it in the list of needs calling it the "need for achievement" and described it thus: "To cope with something important. Coping with physical objects, people or ideas, manipulate or organize them. Doing this as rapidly and freely as possible. To overcome obstacles and achieve a high level. To overcome oneself. Compete with others and surpass them. Increase one's self-esteem through the successful use of one's abilities"[233].

G. Murray created in the early 50's Thematic Apperception Test (TAT), which D. McClelland and his colleagues used as a tool for measuring motives. Of decisive importance in this case had a substantial definition of the concept of "motive to achieve," which they defined as the ratio of the criterion of activity's quality. This definition covers a large number of different activities, their objects and criteria of performance quality, as well as desire to work as best as possible. In this case the issue should be of claims to achieve a certain level, which the acting subject considers obligatory for him and which he wants to achieve [231, p. 367].

The actual experimental study of achievement motivation, were initiated by D. McClelland in the middle of the XX century. With the theme apperception test he was able to fix qualitative individual differences manifestations of achievement motivation. He considered the conditions of formation and development of some or other directedness and expression of achievement motivation. He concludes that the constructive and adequate achievement motivation develops and evolves due to the nature of the socialization process and to a great extent is determined by the specifics of the social environment and educational impact on developing personality.

In the course of further research in this area D. McClelland and H. Hekhausen identified two independent motivational tendencies: the desire

to succeed and the tendency to avoid failures. In this case, the formalization by McClelland psychological conditions of formation of the achievement motivation and those of appropriate behavior is of interest. The first condition is a syndrome of achievement (the predominance of readiness for success over the desire for avoidance of failure), the tendency to self-analysis, the optimal strategy and tactics of goal formation. The second is the success-oriented behavior, (taking personal responsibility for the success of the case, avoiding random, uncertain situations, the use of feedback on the results of these efforts) [231, p. 277].

Works by J. Atkinson and H. Hekhausen have demonstrated that there exists at least three fundamental motivational vectors, which to a great extent determine the nature of the interdependence of active activity and achievement motivation: individual subjective representation of probability of personal success and difficulties faced by the individual tasks; the degree of relevance to the subject of the task in connection with this the force of desire to support the aspirations and self-esteem, a tendency of the personality to adequately attribute to itself, other people, and circumstances, the responsibility for success and failure.

One of fruitful concepts successfully used to explain the achievements in activities is the attributive theory by B. Weiner, which treats motivation, basing on the reasons for giving an explanation of one's success or failure in the performance of a particular activity. "The belief in cause-effect attribution or deducing it by inference generates both an emotional response and an explanation that together affect subsequent behavior. Will a person try to do something once more? It depends on what by the person's conviction was the cause of the subsequent results of his activity"[239, p. 374].

In experimental studies by B. Weiner and A. Kukla it was found that people with high motivation attributed their achievement of success to the presence of ability and effort, and perceived failure as a result of the insufficient effort. Individuals with low achievement motivation believe that the cause of their success is the degree of difficulty of the task or its lightness, as well as "luck" and the reason for the failure – the absence or lack of abilities [238]. Obviously, the explanation of the failure by variable causal factors (effort or accident) promotes an optimistic view of the future and raising the motivation of activity (these factors got the name of *favourable* attributions). At the same time, the attribution of causes of failures to stable factors (e.g., absence / lack of ability or difficulty of problem) contributes to formation of a pessimistic outlook and reduces the motivation of activity (these factors are called *adverse* attributions).

According to the attribute theory of B. Weiner the reasons for success and failure can be measured by two parameters: localization and stability. The first

means that the person seeks the causes of the failures in himself and objective circumstances. The second can be seen as the constancy of action regardless of the reason. The difference in parameters defines the following classification of the possible causes of success and failure:

- the complexity of the task (external stable condition for success);
- effort (internal condition of success, which changes);
- coincidence (external unstable condition of success);
- ability (internal unstable condition for success) [239].

In this case, B. Weiner did not consider the ability, effort, task difficulty and coincidence (luck case) the only reasons that people use to explain their successes and failures. The author proceeded from the fact that they are the most characteristic for activities aimed at achieving. His analysis of the research of a variety of tasks and situations in life has reaffirmed that the isolated causal explanations (types of attribution) are indeed the most characteristic in explaining by people of their success and failures [239].

Critics of the B. Weiner theory point to its weaknesses. Thus, abilities are treated by him as stable causes, while coincidence (luck) – as unstable ones. However, the studies by C. Dweck [230] revealed that abilities and effort may be perceived as unstable by a person, and luck, however, as something stable. People tend to think of good luck as unchanging destiny, which consequently affects their motivation. The results of the analysis of the relationship of causal attribution to performance, according to T. Gordeeva, is also very controversial [39].

Different ideas about one's own abilities lead to different expectations when performing the same task. Therefore, they should result in corresponding differences in the task selection and to different determination in failure situations. According to H. Hekhausen [208], there are two types of implicit theories of intelligence (the notions of abilities) – the theory of predetermination, and the theory of increments. People who adhere to the theory of natural preconception of intelligence, consider ability to be a stable (constant, fixed) and little changeable characteristic inherent to each person in a certain amount. Representatives of the theory of incremental of intellect believe that this is an unstable (non-permanent) quality that can be changed, to developed and improved.

In the studies of C. Dweck and her colleagues it has been found that implicit theories of intelligence not only have an impact on the formulation of educational and life goals, but also contribute to the development of two different motivational strategies (patterns), which are characterized by varying degrees of adaptability of behavioral, cognitive and emotional reactions when faced with difficulties and setbacks in the operation. Focusing on skill acquisition is peculiar to people who believe that abilities are changeable (incremental theory of intelligence); helplessness is characteristic of individuals

with the implicit predetermination theory of intelligence, who believe that abilities are constant and non-developed.

The theory of the attributive (explanatory) style of M. Seligman is trying to explain the absence of behavior directed at achieving, through the construct "learned helplessness." He explains the phenomenon this way: a person learns that the final result does not depend on his actions. This affects his subsequent behavior, especially on the activity or inactivity of applied efforts, the insistence or feeling helpless. On this construct T. Gordeeva writes "... it is a psychological condition that involves violation of motivation directly, as well as cognitive and emotional processes, arising from a lack of control experienced by the subject" [39, p. 9].

H. Hekhausen interprets this as follows: "The experience of the subject, if his experience is that his actions do not affect the course of events and do not lead to the desired results, reinforces the expectation of the subject of uncontrollability of his actions results, causing a triple – motivational, cognitive and emotional – deficiency. Motivational deficiency is manifested in inhibition of attempts of active intervention in the situation. Cognitive deficiency is the difficulty of subsequent learning that in similar situations (in fact controlled to the subject), the action can be quite effective. Emotional deficit is manifested in the emergence of despondent (or even depressed) state because of the futility of one's actions." [208, p. 754].

It is known that the attributive processes in one way or another are related to a perceived self-efficiency – assessment of one's ability to perform any an action under certain conditions. On the one hand, it is determined by regarding the specific task of the person; on the other hand, this term denotes judgments about the actions that a person can perform, regardless of the importance that is given to them. These two points illustrate the difference between the perceived self-efficiency and self-respect – a global sense of self-worth. The first is not global and is not a measure of self-worth. It affects a person's behavior, while the indicators of self-esteem do not allow to sufficiently accurately predict his actions, forcing researchers to question the value of this construct to explain social behavior [231].

*Social-cognitive theory of Bandura's self-efficiency* in a certain sense brings together researches conducted within the frameworks of the theories considered above. The author considers self-efficiency the central determinant of human behavior, the essence of which is how a person feels competent doing one thing or another thing. In the studies by A. Bandura and his colleagues it has shown that self-efficiency exerts a significant influence on the motivational, cognitive and emotional processes, as well as the success of [229].

The scientist identifies four sources of self-efficiency: 1) the experience of success in achieving the desired results, 2) observing how others successfully

cope with the difficulties in solving various problems, 3) verbal persuasion of a person that he has the necessary abilities to achieve the goal, and 4) the perception of one's own emotional and physiological states of emotional tension (the probability of success is greater if a person is not tense and emotionally calm.)

Under the concept of Bandura, views of the individual of his self-efficiency is something more than just a belief that his efforts will determine success of the activities, this is belief in his own ability to cope with activities designed to achieve a certain result. However, the scientist believes that self-efficiency as a personality construct has two important features. On the one hand, it is a judgment relative to the subject's ability to cope with certain tasks, rather than personality traits, on the other it is not a global characteristic of the individual, but his specific features. Therefore, each person has many ideas about his efficiency, one way or another related to various spheres, areas of activity.

Thus, the theory of A. Bandura attaches great importance to cognitive processes in the functioning of a person (motivation, emotion, action). According to him, most of the human motivation arises thanks to them [228]. "The effect of self-efficacy beliefs influencing the motivation of efforts as well as the level of success of the action may appear so great that it will be able to erase the huge differences between people in abilities," – J. Pervin thinks [153, p. 443].

Another contemporary theory, developed in line with the attributive-based approach to motivation is the *theory of perceived control* by E. Skinner [237].

The author has identified three components of activity – activities, resources, and result, the link between them are the human imagination about the possibilities, strategies and control. Each type of representation has a specific effect on the motivation and regulation of activity. Thus, the perception of the opportunities characterizes the confidence of the subject as to what extent he has the means to achieve certain results. In the learning activities they define the degree of the student's belief in his abilities, having access to such means as effort, luck, help from outside. Strategic representations reflect a generalized belief that certain means are sufficient to achieve the goal. Finally, the concept of controlling reflects the degree of the individual's confidence that he is able to achieve some result.

Defining the contribution theoretically-attributive approach to the study of achievement motivation, H. Hekhausen emphasizes the value of motivating reasons for attributing the results achieved, which has made an extremely fruitful impact on the study of motivation. Thus, this approach has a major role in the practical application field. It not only describes and explains the phenomenon of motivation, predicting human behavior, but also provides a reliable tool for personal fulfillment and growth of its adaptive capacity.



In conclusion, let's bear it in mind that, if at the beginning of the XX century, psychologists explained motivation by predominantly needs, instincts and inclinations, in the last few decades, human motivation began to be explained in terms of the cognitive processes (thinking, memory, representation). However, this does not mean that all the determinants of motivation are cognitive in nature. Thus, dissatisfaction of the basic human needs motivates the actions directed to satisfy them.

Cognitive psychology treats motivation as a cognitive-affective process, aimed at encouraging and implementing activities and achieving a certain goal. It plays an important role in the regulation of human activity. J. Caprara and D. Servon write about it: "With regard to motivation there are two factors determining the absolute uniqueness of the individual. It is the ability to evaluate the actions by comparing them to certain standards, and the ability to analyze their capabilities when performing certain actions. These processes, associated with the *I*, function together as part of the cognitive-affective system by which a person exercises self-control" [78, p. 452–453].

Despite the great contribution of attribute theories to the study of achievement motivation, the established in foreign psychology concepts are characterized by a number of shortcomings, and cannot be mechanically borrowed. In particular, foreign researchers' attempt to explain in a single theory the constructs that belong to different, often methodologically distant from each other theories, that led to the fact that the subject area is broken into a number of matters to be addressed separately. Such methodological eclecticism and empiricism of research causes a lot of difficulties and differences in the understanding of motivation and its components.

Further progress in the solution of this problem is possible on the basis of analysis of the stages, levels of motivation, research of motivational structures and determinants, depending on specific situations. In connection with this, perspective is the study of achievement motivation as a complex system of integrated together affective and cognitive processes. The problem is to reveal it as a holistic process of regulating the performance of activities throughout the course of its implementation, and the study of the structure and mechanisms of achievement motivation.

Thus, the study conducted by M. Magomed-Eminov, is an attempt to address this problem. He considers the motivation of achievement as a complex functional system consisting of four structural components, each of which performs specific motivational function in the course of activity: actualizing (motivation and initiation of activities), selection (the processes of target selection and the corresponding action), realization (regulating the performance of the action and control of the implementation of intent), post-

realization (processes aimed at the termination of the action or the replacement of one action with another) [121].

In his opinion, consideration of motivation as a complex multi-level functional system and the unity of affective and cognitive processes can overcome a one-sided interpretation of achievement motivation either as a dynamic formation, or as cognitive. Research results obtained by the author can be used for practical applications to optimize performance and increase its efficiency. Furthermore, they can be applied to formation and development of motivation of achievement for different people.

### ***1.9.2. Methods and techniques to form motivation of achievement***

Currently, there are a number of modern psychology studies on the problem of the formation and development of achievement motivation. The great interest in this regard is the work of H. Hekhausen describing the age-based indicators of achievement motivation. He notes that the basis of conduct directed at achieving, develops between 3 and 13 years. Analyzing the relationship between activity and achievement motivation, H. Hekhausen highlights the following groups of indicators of general age-related development of achievement motivation, corresponding to the three motivational determinants of achievements:

1. attractiveness of success and failure;
2. personal standard;
3. type of attribution.

First and the earliest observed group of indicators of achievement motivation is related to the reaction to the result of one's own activities. These indicators form the cognitive prerequisites for experiences of success and failure and, thus, the attractiveness of both events given to them by causal attribution. The second group of indicators is associated with cognitive prerequisites for the formation of personal standards in the sense of forming a balanced level of aspiration. The third group of indicators creates cognitive prerequisites for the formation of attribution type.

All these indicators of age-related development are set by the logic underlying the relationship of the individual with the environment and reflect the general trends in the development of achievement motivation. In the presence of such data there appears the question about the causes of the differences in the expression of achievement motivation among representatives of the same age group. In view of this, along with the above indicators H. Hekhausen identifies a group of indicators of individual differences in achievement motivation:

- individual differences in the attractiveness of success and avoiding failure;

- prevailing personal standards;
- individual preferences for the type of attribution.

It should be noted that the reasons for the differences he relates not to the rate of individual development, but to its qualitative indicators. In this case we are talking about the differences that cannot be directly attributed to the non-uniformity of the overall development, but refer to the specific effects of the social environment [208].

D. McClelland argued that achievement motivation may develop in adulthood, primarily through education. Consequently, this process continues during the formation of professional identity among students and in the process of selecting their educational path. Judging by the results of the study of this problem, achievement motivation can be developed in the context of professional work when people just feel all the benefits associated with achieving the desired result. In this regard, special attention needs to be given not only to the system of motivation of students during training, but also to the creation of conditions for their realization. Adequate achievement motivation can be formed and structurally realized only in terms of cooperation with teachers and, above all, their positive response to the success and support during failures.

On this basis, he identified the following stages of the motivational training, and, therefore, the development of achievement motivation:

1. The study and development of the syndrome of achievement.
2. Introspection (Self-analysis).
3. Formation of the desire and ability to set high, but adequate goals.
4. Social support.

Each group in its turn consists of a set of specific actions. One should also focus on the findings of D. McClelland as a result of testing the program for the development of achievement motivation. "For the changed motive of achievement to remain in behavior for a long time, external possibilities of realizing this motive are necessary, in the case of activities lacking independence, such opportunities are too insignificant" [232].

H. Hekhausen also comes to similar conclusions: "Accordingly, the maximum change in achievement motive is gained when two conditions are met: 1) the maximum dissonance between the original motivation and the objectives pursued by the course program, and 2) long-term testing of new behavioral opportunities that have emerged after the course of development of achievement motivation. The impact on the change in the motive will be effective if it does not stop and becomes stable if it is combined with the corresponding change in behavior for a long time." [208]

The next stage of research in the development of achievement motivation is associated with the emergence of programs based on theoretical-attributive

elaborations, namely, on the intermediate cognitive processes of attribution of success, failure and self-evaluation. In this direction, it is interesting to consider the work by R. de Charms. He considers the experience of the motive to achieve as a core phenomenon, a sense of belonging and, on this basis, schedules and implements a program of changing achievement motives at training sessions, with special emphasis on the intentionality of action and personal responsibility for their result. As for development of achievement motive R. de Charms considered necessary to:

1. Set realistic but ambitious targets.
2. Know one's strengths and weaknesses.
3. Believe in the effectiveness of one's activities.
4. Identify specific behaviors that enable to achieve the goals.
5. Receive feedback on the achievement of goals.
6. Take responsibility for their actions and their consequences and take responsibility for the actions of others.

Consistent implementation of these goals requires the development and strengthening of achievement motivation of the individual. It should be noted that if the research on the development of achievement motivation by D. McClelland were mainly focused on the development of cognitive representations, the programs offered by R. de Charms, pay great attention to the affective or emotional component of achievement motivation, as well as attribute-component – the experience of one's own involvement.

Sufficiently original and efficient are the programs of achievement motivation development aimed at creating the type of attribution, leading to improved self-evaluation. Motive to achievement is regarded as a system of self-assessment, and to the corrective influence were subjected three determinants of motives: the processes of formation of the level of claims, causal attribution, and self-evaluation. These determinants correspond to the discussed above indicators of the performance of individual differences by H. Hekhausen.

The program includes the following steps:

1. The subjects were explained their experiences and actions determined by the orientation to failure (including diagnostic techniques).
2. The subjects' attitude was contrasted with the position of individuals, focused on success, especially were highlighted the differences in causal attribution.
3. Subjects learned the scripts of actions of success-oriented individuals and fixed them in role-playing games.

The authors of such programs have tried to influence three determinants: by means of learning the desired patterns of behavior, praise and tokens of respect, learning by example of the program presenter, as well as through self-observation, recording and verbalization of inherent motive to achieve behavioral and

cognitive elements. Methods of formation of achievement motivation came to the following procedures: a psychologist or specially trained teachers explained to the students how an individual with a highly developed motivation for achievement thinks, speaks, and acts. There have been developed a variety of practical courses of training motivation of achievement (training videos, special game booklets with themed explanations).

One should also note training programs to teach the type of attribution, leading to overcome the learned helplessness. The works of C. Dweck modified the behavior of school-children with a strong learned helplessness by means of one of the two programs. Subjects who were engaged by the first program from time to time suffered setbacks; they were made to feel responsible for their failure, attributing it to insufficient efforts. The second program followed the strategy of positive reinforcement, and the children always gained success. This strategy subsequently didn't lead to any improvement of activity and achievement of its results. While the first group of subjects showed improvement in their achievements in failure situations, and in a greater extent than before explained them by lack of effort [230].

To conclude the mentioned above, consider the definition of the relevant interactions among schoolchildren by R. Burns. In the book, "The development of self-concept and education," he specifically highlights the image of the original motivation for learning, assistance in the formulation of its goals and objectives, willingness to share the experience of overcoming difficulties, and active participation in group interaction and empathy [16]. This is the very attitude towards children that makes it possible to avoid education in the form of routine training sessions, when the assimilation of knowledge is basically mandatory, not optional. As part of nondirective pedagogy, as mentioned earlier, a targeted correction of the prevailing motives is allowed, as well as the formation of new motivational structures. Thus, almost all the children who took part in the training, started to connect future career with school success.

Russian and Ukrainian psychologists consider the development of achievement motivation from the position characteristic of the Russian psychology of person-activity approach. They stress that the active subject position is a significant factor in the development and transformation of motivation of success. "The way the program and the specific life goals, which are valued by the individual as best satisfying the needs and with respect to which the intentions to achieve are undertaken, are the system of individual motives," writes a famous Ukrainian scientist S. Zanyuk [63, p. 42].

Speaking about the development of achievement motivation, many researchers have in mind, first of all, the formation of an active life strategy, development of success-oriented behavior and performance goals of activity. Thus, K. Abulkhanova-Slavskaya researching the actions of the individual as a

subject of activity writes: "The personality through its activity finds the objects, the conditions and the situations of needs satisfaction, regulates individual actions and behavior and in a certain way categorizes, models, transforms reality. Activity in the broad sense of the word is inherent in the individual way of life organization, regulation and self-regulation based on the integration of needs, abilities, personality's attitudes to life on the one hand, and the requirements of society and the individual circumstances on the other" [1, p. 113–114]. And she points out the following signs of active life strategy of a person:

- choice of a way of life;
- ability to resolve the conflict, "I want – I have";
- creativity and creation of conditions for self-realization.

In this regard, it is necessary to consider the results of a study conducted by L. Mitina which was directed at development of characteristics of a competitive personality by means of a specially developed psychological technology. As the main psychological condition of the personality development she considers increasing the level of self-awareness. At the same time she notes that the psychological foundation of a personality of the future or a competitive professional in any field of human activity are such basic features as personal orientation, competence and flexibility [131].

L. Mitina identifies four stages of transformation of personality and behavior: training, awareness, re-evaluation, the action. They combine the basic processes of personality development: motivational (I stage), cognitive (II stage), affective (III stage), behavioral (IV stage).

E. Kozietskaya examines the phenomenon of achievement motivation in its relation to professional activities of the individual. As the main criterion of the achievement motive she understands the image of the quality of professional work, which has become meaningful for a person. The main factor influencing the development of achievement motivation is, in her opinion, the professional self-evaluation. In this case, E. Kozietskaya is developing the functional structure of the development process of achievement motivation under the influence of self-evaluation in the form of the following five stages:

1. Problem of the former system of achievement motivation under the influence of the negative attitude to the relation of real and ideal images of "I – a professional."

2. Planning for change in the system of achievement motivation, implemented on the basis of the ideal image of "I – a professional."

3. Implementation of these changes.

4. Securing the newly emerged system of achievement motivation based on the positive attitude to the relation of the real and the ideal image of "I – a professional".

Thus, based on the development of achievement motivation, according to E. Kozievskaya, is the process of modeling the ideal image of the successful "I – a professional" and the formation of a person's realistic self-image the most relevant to the ideal image.

E. Lushnikova highlights the following features of achievement motivation in learning: cognitive function (the desire to acquire the necessary knowledge), emotional function (the influence of emotions on learning activities); integrative function (system of self-assessments and evaluations of the gained result). The author notes that the formation of achievement motivation requires building a system of pedagogical tools as a set of interrelated elements composing a stable unity. The backbone factor of such a system is the targets. Therefore, the main mechanism for ensuring the efficiency of the development process of achievement motivation is, in her view, the mechanism of goal-setting. In the future, on the basis of motives development of the need to achieve and the desire for self-development, self-improvement take place.

A. Sal'kov in his study as the basis of development of achievement motivation considers the levels of choice of values, namely, the possibility of implementing an informed choice by a personality in a new social situation. He identifies the following types of possible strategies:

1. Active-constructive, based on the high expression of the desire for success and focus on the attractiveness of success. The most effective type of behavior.

2. Active-contemplative, based on the desire to avoid the non-successes and focus on achieving success. In this case, the obstacle to performance is uncertainty in the choice of means of achievement, lack of regular and systematic approach in decision making.

3. Uncertain (variative), based on the desire to succeed and focus on the expectation of failure. An obstacle to the effectiveness of activities is the disparity between these two determinants.

4. Passive, based on the desire for avoidance of failures and orientation on the attractiveness of failure. This type is the least effective, and is characterized by a passive lifestyle. [180]

Analysis of the models described above reveals the following approaches to the formation and development of achievement motivation in foreign psychology: emotional and cognitive (D. McClelland) attributive-behavioral (B. Weiner, C. Dweck, H. Hekhausen ), personal involvement (R. de Charms). In Russian and Soviet psychology the following approaches can be identified: Increasing the level of consciousness (L. Mitina), changes in professional self-esteem (E. Kozievskaya), goal formation (E. Lushnikova), value-sense orientation (A. Sal'kov). And each approach emphasizes the predominance of the motive to achieve success over the motive of avoiding failure.

Thus, as the main criteria for the formation and development of achievement motivation are the intensity of motivational, cognitive, emotional and evaluative, attribute and behavioral characteristics of the individual. This fact became the basis for the development of programs and models of achievement motivation by M. Kondratieva. The author proposed the blocks that correspond to the levels of development of the achievement motivation [94].

The first level involves the influence on cognitive components. Changing views on the level of available information and current knowledge is the first and essential step in the development of achievement motivation. Getting information about the success, expanding of the world-view, acquaintance with a variety of options to achieve a successful goal is the primary condition of the individual's involvement in the activities of achievements.

The second level of achievement motivation suggests an impact on emotional-evaluation block. Emotional experience and affective coloring to achieve the success and failure of a collision.

The achievement motive shows how much a person tends to self-realization of his capabilities. In this regard, it is interesting to consider the systematic model of achievement motivation by T. Gordeeva. It is based on the following components: the pursuit of mastery (the orientation in any work on new quality-standard), the desire to compete (competition and leadership), the desire to work (satisfaction from a job well done). [39]

Of interest are works by Ukrainian scientist S. Zanyuk [63], in which he reveals the structure of achievement motivation and signs that allow to judge its presence. He proposed a procedure for enhancing achievement motivation (reinforcement, self-sustaining, creating favorable conditions). The author concludes that the achievement motivation is revealed in many aspects of personal growth and is a relatively stable formation. However, it is also a dynamic system which begins to function in concert with other situational conditions that were the subject of his study.

In researches of psychologists studying the problem, various methods of formation of achievement motivation and types of training are used. They designed motivation training courses that promote increase in activity and initiative, the transition from tactics to avoid the failures of the tactics of achievement motivation. Among them we should mention the motivational training by E. Sidorenko. According to the author, it must combine spontaneity with systemacy.

The aim of the motivational training is mastering the techniques of creation and strengthening of the achievement motivation. This requires creation of such space where personal reasons important for activity are activated, as well as creation of conditions in which the energy of activated motives increases. After the training, people's determination and their confidence in the correctness of



their actions, the expectation of success, balance of claims level increase. As the most effective technique a complex can be considered that includes several methods: questionnaire, experimental, observation, conversation, "independent characteristics", analysis of the activities' results. Each approach focuses on the advantages of the motive to achieve over the motive of avoiding failures.

In the psychologically meaningful aspect, achievement motivation is a kind of interpretive "key" to understanding the nature of the claims level, desire for self-esteem, tactical-and-strategic approach of specific individuals in building their ways of taking responsible decisions and regulation of the action-based activity.

The level of claims plays a prominent role among the mechanisms of mental causation of behavior and simultaneously displays its identity (self-consciousness). The concept of this came as a result of experiments in the laboratory of Lewin, where his colleague F. Hoppe revealed the phenomenon of the level of claims. In fact, it is a choice on the scale of the difficulties that people are constantly faced in life, performing certain tasks. And this complex relationship of availability and attractiveness of life or experimental tasks is determined by the subject's claims, that is, his demands, needs, ambitions. All of this is manifested as a consequence of the current affective state, and this determines the selection of challenging assignments in some cases, and easy ones in the others, when one can feel either joy of overcoming difficulties or satisfaction from preferring a simple task without failure.

In numerous studies on the subject dynamics of the level of claims has been found. It depends on various factors: difficulty of the presented tasks, the degree of involvement in the activities adopted by the subject of the scale of reference, etc. But the main thing is its changing depending on the experience of success or failure: most people have a tendency to increase the level of claims following a positive outcome and reduce it with a negative result. However, such a natural, logical reasonable behavior is not always observed.

The problem is that the motivation of the "achievement – avoiding" has sometimes accentuated character. Already the experiments by F. Hoppe showed some stable trend, which he called the level of *I* (i.e., overestimated or underestimated level of claims). This is what determined inappropriate choices by the subjects of the offered tasks. There were even opposed paradoxical reactions such as, for example, in experiments of M. Neumark with students. In this case, the subjects with inflated claims, regardless of the result in the previous task, chose only a difficult task afterwards, and unable to cope, accused of it anything and anyone but themselves. The behavior of those whose claims were underestimated was also peculiar. They, on the contrary, in all cases preferred simple tasks, and, having failed, everyone blamed of it himself. Set of experiences associated with the first of these paradoxical reactions was called by

Neumark "affective inadequacy." Its reason is a substantial discrepancy between the person's self-evaluation and his real and even hidden abilities. Setbacks are inevitable in such cases, but for the sake of retaining his usual self-evaluation the subject can ignore them, subconsciously rejecting everything that violates the established self-image.

Among the definitions like "accentuated", "inadequate", helping to understand the ambiguous manifestations of claims level, it should be noted and the "vicious circles of attribution." This draws the attention of A. Orlov who has analyzed the international experience of the study of this problem. He connects the claims with a "causal schemes" of explaining the origins of one's own behavior. For example, a student with low expectations of success, having got a high mark, connects it with an unstable external factor like luck. The claims in this case do not rise, because on this shaky basis further advances are not expected. In cases of failure such pupil is not upset, because he does not overestimate his abilities. It is namely to them as internal stability factor that he attributes the cause of failure. This is called "the game with only one goal": gained by luck, the success does not increase claims and the usual setbacks reinforce the established level of claims, or even reduce it.

If, on the other hand, a student with high aspirations gets an excellent mark, he believes that this was due to the stable factor – his abilities. In this case, the expectation of his success in the future logically increases. Faced with a sudden setback for himself, he is inclined to interpret it as an unstable factor of bad luck. In this case, there is no expected reduction of claims. That is, there is still the same "game with only one goal," only with fixing adequately high level of aspiration [147, p. 136, 137].

The specific motivation, manifested in excessive or, on the contrary, insufficient claims and the related self-confidence or caution, usually occurs when a person is faced with a situation of moderate difficulty, i.e., when the probability of success or failure is in the range of 50%. To such situations can be attributed hypothesis of J. Atkinson about the raise of the subjective probability of success in the second attempt, if the previous one was successful.

In this case, the subject is more likely to set a more complex problem, with which he will strive to continue what has already been successfully performed earlier. Therefore, the focus is mainly on achieving higher and higher results. This behavior is typical of the people, who would like to have power, higher skills, to surpass the particular partner, a commercial success, to take a higher position, etc. This person does not stop there, and having tasted the joy of success, wants more all the time.

There are special motivation mechanisms that contribute to implementation of the set intentions and execution of the corresponding action. Motivation

processes are not reducible to any separately taken motive, or to motivational tendency of action arising in the choice of the goal, but include a qualitatively new level of motivation, regulating, controlling the implementation of the intention. These mechanisms are: rational strategies, various self-instructions, the emotional impacts, the control of the situations, the control of the time allocation.

In this case, the subjects with the motive of desire to succeed use the following methods of self-control: 1) a rational strategy directed at raising the profile of the practical activity – actions, 2) self-instructions, requiring to hold orientation of cognitive and emotional processes in the current situation, and 3) emotional control, a directed activation (anger, dissatisfaction, etc.). Subjects with a motive of avoiding failure use other methods of self-control: 1) the rational strategy that devalues the importance of a common goal, and 2) self-instructions, obligating not to distract by irrelevant aspects of the situation, and 3) emotional control, aimed at relaxation (sedation, self-confidence, etc.).

The predominance of one or another motivation is always accompanied by differences in the choice of the difficulty degree of the goal. Those who are motivated to succeed, prefer goals that are only slightly superior to the results achieved. Motivated by the failure are divided into two subgroups: one of them unrealistically underestimates, and the other overstates the degree of difficulty of the purpose [226, p. 379, 380].

Experimental studies have shown that one of the main mechanisms is the actualization of achievement motivation is the motivational-emotional assessment of the situation, which consists of assessing its relevance and general competence in the situation of achievement. The intensity of the motivational tendencies changes depending on these parameters both in subjects with a motive to achieve, and those with the motive of avoiding failure. "Emotional experiences, says V. Vilyunas, are the sole representative of motivation processes at the level of mental reflection of the signal system, which open to subject, pointing to the signals and the impact corresponding to these items" [32].

The feature of human motivation is its positive-negative duo-modal construction. These two modalities are shown as two kinds of emotional experiences: pleasure or pain. In human behavior occur almost simultaneously motivational tendencies of different origin. In this regard, the pursuit of goals is a summary by the expression of his expectations of success or failure. Emotions of success / failure are the "universal mechanism", which is connected to the process of regulation of the activity and reports the individual on the achievement of objectives and justification of difficult efforts.

The successful implementation of the activities is only possible on condition of strong motivation, which means perseverance in achieving the desired results. Plans and programs are not sufficient to achieve success. They

are often not realized because the person lacks purposefulness, courage, and does not have the appropriate incentives to implement them. To do this, motivational stress associated with the formulation of goals and effort involved in achieving it is needed. However, if too strong motivation, activity level increases, and so does the tension, so that work efficiency is reduced. This is due to the emergence of uncontrolled emotions (excitement, stress, etc.).

It has been experimentally found that there is an optimum level of motivation at which one can achieve the desired results. With a weak and extremely strong motivation, efficiency is not as high as at the optimum.

### **Questions for self-control and verification**

1. Give the definition of "achievement motivation".
2. Who was the first to propose a general theory of achievement motivation?
3. Define the concept of "causal attribution."
4. What is the content of attributive theory by B. Weiner?
5. What are the results of studies by C. Dweck?
6. What is the content of social-cognitive theory of Bandura's self-efficacy?
7. How to interpret the motivation within cognitive psychology?
8. What is contribution to the study of achievement motivation by H. Hekhausen and D. McClelland?
9. What are the main directions of studying achievement motivation in national psychology?
10. What role does the level of claims of psychic self-regulation mechanisms play?
11. What are the mechanisms of motivation that define implementation of the intentions and the implementation of appropriate actions?
12. What is the meaning of the law of Yorks – Dodson?
13. What is the role of emotions in the formation of achievement motivation?
14. Which contributed to the transition from the tactic of avoiding failures to that of the hope for success?

## **Part 2. STUDENTS' FOCUS ON SUCCESSFUL PROFESSIONAL ACTIVITIES AND ITS FORMATION**

### **2.1. Pedagogical conditions of formation of students' focus on a successful professional career**

#### **2.1.1. *The focus of the students for a successful professional career: its structure and methods of forming***

In modern conditions, great importance is attached to the professional development as an essential condition of life success. One of the main needs of a person is to achieve success in a meaningful activity for him. *Professional success is the development of strength and abilities with the help of which a person achieves success in his professional activities, organizing his energy and effort as well as knowledge and ability accordingly.* The dominant activity of the student, as it is known, is his training. Therefore, it can be argued that cognitive demand and the need to achieve success are the necessary components which to a large extent, determine their task at this stage of life – the success of learning-and-cognitive and future professional activities.

Preparation for professional work involves the formation and development of value-concept components of professional orientation of the person which should not only be understood, but also internally accepted. Inner position becomes the condition that, according to S. Rubinstein, resists outside influences. The formation of students' inner world is a central step in the formation of the individual as a professional and an important task of higher education [177].

It is known that the training-and-cognitive activity is the main way and tool of mastering knowledge. At the same time, it is an essential condition, during which a person gains experience, forms skills, develops mental processes, forms the intellectual, emotional, and volitional qualities and abilities. Considering the cognitive activity as a special formative integrity, educators and psychologists have studied in detail its components: motives, goals, actions, operations. This approach allows to make the object of attention many phenomena of the inner world of a student, his interests, values and beliefs, motives, activities, skills, knowledge, skills and abilities that affect his professional orientation.

The theoretical basis for the study of problems of professional directionality was the concept of an individual's orientation S. Rubinstein, who defined it through attitudes, trends, needs, interests and motivations. He advanced the development of the individual in the course of activity and raised the question of temporal trends that like the motives determine human activity,

and themselves, in their turn, are determined by its goals and objectives. The content aspect of value-orientation includes value-and-meaningful formations and purposes. They provide the internal integrity of the individual, form the individual's attitude to oneself and other people, to the profession and to the world at large. Value-and-meaning formations are the most important regulators of human life and activity, including professional one. The value of objects and phenomena and their meaning for the person is what determines his behavior [178].

*Professional orientation is often interpreted as a set of motives, personality attitudes, plans, and values in the chosen specialty.* It is there that purposes, motives for which the person operates are expressed, as well as its subjective attitude towards the opposite sides of the chosen activity. Thus, it acts as a system-forming personality characteristic that is socially conditioned and is shaped by education.

Professional orientation of students is a special system of continuous mental components that reflect the structure of learning-and-cognitive activity. It is determined by the characteristics of its organization and is characterized by the logic of unstable aspirations of students in promoting a persistent need-motivational sphere filled with personal meaning and is focused on the successful cognitive and professional activities. It means the success of a person's mastering profession and enables the subject to fully realize himself in his professional activities and at the same time to benefit society.

To form the focus on a successful professional career its theoretical understanding is necessary that is to find out the pedagogical meaning of this concept, mechanisms and principles of this process and its motivational value. An analysis of the scientific literature makes it possible to determine *the directedness on a successful professional career of students as a set of persistent motives, beliefs, and values that lead to domestic needs in enhancing their own personal potential, self-fulfillment and success in their future professional activity.*

Determining the students' orientation on a successful professional career as integrity one should highlight in its structure the following components: 1) motivational-and-value (value-formation of students for professional work, an interest in their future profession, needs, beliefs and expectations, achievement motivation), 2) competence (academic achievement of students: volume, completeness, consistency of professional knowledge and skills, goal-setting, the dynamics of personal growth, commitment to professional activity), 3) personal-and-reflexive: professional-and-personal qualities of students needed to succeed, the formation of the reflexive skills, adequacy self-esteem, communicative competence, the ability to self-development and self-improvement.

The analysis of the literature makes it possible to conclude that the focus of the students is increasingly a subject of study of psychology scientists. Considering this concept from the pedagogical point of view, that is, as an object with a particular structure on the basis of the study of the relationship and interdependence of all its components, it is necessary to determine the pedagogical conditions, technologies and techniques needed for its formation. It should be remembered that *the formation is seen in psychology as reinforcement of behavior, more and more similar to the desired* [166, p. 555].

This approach to learning helps future specialist in self-organizing and self-realization, for which corresponding pedagogical conditions must be created.

### ***2.1.2. The theoretical justification of pedagogical conditions necessary for the formation of the students' directedness towards successful professional activity***

In the scientific literature, the term "condition" entails diverse content equivalent, namely: a) the circumstances from which something depends, b) the requirements that apply to someone or something, c) an oral or written agreement on something the agreement, d) the situation in which something happens, and e) requirement, which has been brought etc. As derived from the word "condition" the category "pedagogical conditions" has not a single interpretation.

For example, some scientists by pedagogical conditions understand the circumstances that affect the success of the operation and development of the entire educational system (I. Isayev, et al.). Other scholars interpret the term as factors and the rules of the successful implementation of educational activities (G. Nazarenko, et al.) still others – as the requirements that teachers must fulfill in order to ensure the effectiveness of the educational process (N. Manzhelii, et al.).

The conceptual basis of the technology and realization of pedagogical conditions of students' orientation formation for successful professional activities are the basic tenets of the theory student-centered learning, formulated in the works of such scholars as S. Archangel, N. Basalaeva, B. Bitinas, E. Bondarevskaya, V. Bocharov, O. Ljashko, V. Serikov, G. Selevko, A. Hutorskoy, I. Yakimanskaya et al.

Patterns of student-centered learning have been the most reasonably formulated by the famous didactician S. Archangel, who view them as essential, permanent, persistent connection between the teaching factors, events and actions, namely:

1) educational productivity the of the subjects of training increases if they take a conscious part in defining the learning objectives, selection of its content and form;

2) receiving by subjects of training of personal educational product in accordance with the similar external educational standards enhances learning motivation and productivity of education;

3) use in the educational process of open questions that have no simple answers, promotes the development of creative qualities of the subjects of study;

4) implementation in teaching-and-cognitive process of interdisciplinary connections contributes to the formation in the subject of learning of a complete picture of the world;

5) the educational results of subjects of training do not depend on volume of educational material, but on the content of the educational product that is created by them;

6) diagnostics of the subject's of training personal educational predisposition is more efficiently detected by improving his educational achievements. [10]

A. Hutorskoy specifies these regularities in the form of three laws of student-centered learning: the law of the relationship of subjects' of training creative self-realization and education space, the law of the relationship of training, education and development, the law of learning dependency on the nature of the educational activities of training [212]. A system of this approach should be based on sound methodological basis, which includes the use of the basic principles of didactics.

Classical principles of didactics are: the principle of activity and consciousness, the educational nature of the training, its difficulties and accessibility, of systematicness and consistency, systemacy, connection of training with life, scientific content, visualization and others. They represent the common approaches to learning as a component of general education. However, these principles are not a sufficient condition for the organization of student-centered learning at a higher educational establishment. According to A. Hutorskoy, the principles of student-centered learning are: personal goal setting, the choice of an individual educational trajectory, substantive basis of the educational process, productivity and situational learning, reflection [211].

Is it necessary to supplement their addition with the system of principles proposed by other authors (I. Bech, E. Bondarevskaya, V. Serikov, et al.) In their view, the basic principles of student-centered learning are the recognition of the subject's of training individuality, creation of necessary and sufficient conditions for hit development, the ability to self-realization in the learning-and-cognitive and other activities, the principle of variability and subjectivity. They can be implemented with considering of specific educational technologies aimed at enhancing the educational process.

The backbone component of educational technology is the goal which is determined by scientists (I. Volodarskaya, E. Mitin, et al.) as the expected



concrete results of the educational process, expressed in terms of pedagogy. [33] As the goal of training an engineer is recognized his establishment as a successful professional in the future. This implies professional and psychological readiness of the graduate, which allows a possibility of direct involvement in professional activity without long adaptation of practice, and to successfully and competently perform their functions and responsibilities in future.

Formation of a complex set of extremely critical, interrelated and interdependent conditions necessary for a successful career requires a scientific approach to educational content. One of the major problems in the area of its design is to determine the system of requirements that govern the choice of the components in terms of didactics. According to the results of pedagogical research by V. Krajewski, V. Lednev, didactic basis for the formation of educational content is composed of the following principles:

- correspondence of the education content to requirements of society;
- structural unity of the education content at all levels of formation;
- correspondence of the content to the general structure of the professional activity;
- functional completeness of the educational content components;
- taking into account the laws of gradual development of professional activity;
- focus;
- scientific character;
- consideration of the unity of the content and procedural aspects of the educational process;
- consideration of the mechanisms of learning;
- taking into account the age and individual differences of students [99, 111].

These principles are the starting point in determining the content and procedural components of technology of forming `readiness for future professionals to succeed professionally. The focus of training for the task demands its content to be consistent with and ways of performing activities and mechanisms of individual personal growth.

To achieve these goals in the educational process of higher education it is necessary to develop its organizational and content model in which at each stage should be established pedagogical conditions necessary for the formation of the students' focus on a successful professional career, namely:

a) providing a positive motivation of professional training (value attitudes of students for their future profession, professional and educational interest, achievement motivation);

b) the widespread use of context training aimed at the acquisition of knowledge, development of professional skills, the acquisition of professional

experience and professional qualities as a significant foundation for a successful transformation of the learning activities of students in professional roles;

c) to draw students to the professional self-education aimed at self-realization of the future specialist.

Thus, the traditional approaches to the educational process of students of higher technical educational institutions do not adequately contribute to preparedness for future graduates to the professional activities due to difficulties of both objective and subjective character that hinder this process. It is needed to develop its technology as a complex multi-level process that is characterized by students' personal development and by its directedness at successful professional career. Therefore of special importance is not only theoretical substantiation, but also the experimental verification of educational environment conducive to the solution of this problem.

### **Questions for self-control and verification**

1. What is professional success?
2. Give the definition of "professional orientation".
3. What are the components of the professional orientation?
4. What are the pedagogical conditions necessary for the formation of orientation of students at a successful professional career?

## **2.2. Formation of the orientation of students at a successful professional activity**

### **2.2.1. *Common questions of the organization and conduct of experimental work***

To study the formation of directivity at successful professional activity and the state of future engineers' preparedness there was conducted a pilot study, which involved 635 people. Among them there were 565 students of various disciplines and courses, and 70 teachers of higher technical educational institutions of Ukraine.

During the interviews with the students, their survey (see Appendix D), it was found that for the junior years 56 % of respondents questioned the correctness of the chosen profession, 67 % of respondents had little understanding of the profession, and their functional duties, 76 % of respondents admitted they might learn better. They claim their fair tuition is hindered for such reasons: 1) the classes do not cause special interest, 2) lack of need for active cognitive activity, 3) the lack of free time, 4) difficulties in the perception of educational material in certain subjects, and 5) lack of understanding of the significance of individual subjects for future careers. When asked about the level

of their professional focus on engineering activity and success achievement in it, 12% of the students rated it as high, 77 % as the average, 11 % as low.

At the undergraduate year 66 % of people believe that they are not trained to the level of its abilities. The main reasons mentioned: disinterest in the learning process, a sense of difficulties in studying certain subjects, lack of time to study. Asked how the students rate the condition of their professional readiness, 20 % of undergraduates rated it as high, 74 % as sufficient, 6 % as low.

There was also traced the dynamics of exclusion of some students of higher technical education for unsatisfactory performance. It was found that the first year accounted for almost half of the total number of expelled students, the second year for 38% of students. These data suggest that at this stage of training special attention should be focused on the formation of motivational-and-value relation to future activities.

Based on the analysis of the data the general conclusion was made that the formation of the orientation on a successful professional career of future engineers is in a poor state, and the current system of training students in technical colleges does not contribute to its effective formation. However, given the need to develop this characteristic of future engineers as a prerequisite of their readiness to successfully perform their professional functions, the solution of this problem should be the focus of the teaching staff of higher education establishments.

To test the hypothesis of the study there was conducted an educational experiment, which was attended by engineering students, a total of 230 people. Among them there was the experimental group E (110 people), which worked on the pilot program, and the control group K (120 people), in which training was carried out conventionally .

In conducting the experiment the following methods were used:

1. The method of observation to study the characteristics of the students' identification of formation of future engineers' focus on successful professional career. During the observation organization the researchers were guided by the principles of consistency and systematic approach, which provided an integrated and consistent recording of activities, situations, and actions.

2. Surveying different types and methods of allegations in order to study:

- motivational-and-value sphere of future engineers' personality, including to determine whether they have the motivation to succeed;
- the professional competence of future engineers (the availability of relevant knowledge and skills);
- the level of formation of personal qualities necessary for a successful career;
- judgments of teachers and students on how to improve the formation of students' orientation on successful professional career.

3. Conversations and interviews with students to clarify the ascertained data.

In contrast to the survey interview, interviews were conducted selectively but, at the same time adhering to the requirements of random selection. The analysis of the responses obtained during the interviews and the survey interview, comparing them with the results obtained by the use of other techniques, allowed for creation a more objective picture of the state of the investigated problem.

4. Ranking method to determine the significance for students of various qualities, values for the formation of their orientation towards a successful professional career.

5. Psycho-diagnostic techniques (e.g., differential-diagnostic questionnaire DDQ by E. Klimov), test-questionnaire on the existence of motives for success by A. Rean, method of diagnostics of satisfaction of basic needs, the definition of formation of personal qualities necessary for a successful career, as well as study of the dynamics of students' personal professional growth through awareness of their self-concept.

With the help of selected research methods (observation, survey, individual interviews, method of statements), students' value attitude to the engineering profession was found, as well as the leading motives of their desire to master their chosen profession. To clarify the relationship of students to mastering future profession they were asked to choose from a list of statements the one that best suits their position:

- I want to master the profession of mechanical engineer and for this I will put maximum effort;
- I want to master the profession of mechanical engineer, but applying to this a minimum of effort;
- I have no particular desire to improve my professional competence because I do not plan to work in the specialty.

According to the study, the positive-active attitude for a profession was detected in 35 % of the students, the positive-passive in 42.2 %, neutral (indifferent) in 17.8 % of future engineers. A negative attitude is fixed at an average of 6 % of the total number of subjects. Thus, the survey results lead to the conclusion that the student is typical of positive-passive and positive-active attitude towards efforts to master future profession.

In this regard, special attention was given during the research to the study of professional interest, which is a causative mechanism of learning that stimulates and activates the uptake of professional knowledge, development of necessary skills and qualities. Diagnostics of students' sphere of professional benefits by Klimov's DDQ (see Appendix D 2), showed that only 46.3 % of people were inclined to technical activities, 22.7 % to sign activity and 31 % to work with people and other activities. Although the tendency to sign activities

and to work with people can be successfully implemented in a professional engineer, the data show an insufficient level of career guidance to identify the preferences of students before enrolling in technical colleges.

To measure motivation "Hope for success" (HS), and "Fear of failure" (FF) test questionnaire by A. Rean (see Appendix D3) applied, which we used in the study of diagnostics of the achievement motivation level. It was found that the first year students at the time of ascertaining phase of the experiment had relatively low motivation for success: only 20.0 % had a high level of achievement motivation, 42.7 % the average, 28.2 % low and 9.1 % indicated the motivation of avoiding failure. These data suggest that their perceptions of success and the preconditions necessary for a successful career were rather "vague".

Traditionally, the motivation systems of the educational process are often related by scientists to the formation of needs, in knowledge, abilities, and skills within the subject's program. However, the range of needs that affects the behavior of students and their attitudes to learning is much broader. The study of basic needs is one of the most important in the various theoretical concepts. Some scientists consider as the main drivers biological factors (instincts, human needs), others – social, and still others are based on a theory of one motive, or from the representation of a "catalog of motives."

In this research, the study of the students' needs was conducted on the test "Method to examine basic needs satisfaction" (see Appendix D4). It was found that in general, all the students had the desire to secure a material comfort as top priority, the second in their rating was to increase the level of skill and competence, the third – to develop their strengths and abilities, the fourth – to secure the future and in the fifth place was to earn a reputation. Should be noted weak expression of the need to choose for a job that requires full commitment (ranked 9th), and the needs of an acknowledgment, and respect – 12th place.

Focus on a successful professional career of students implies goal-directed behavior, which includes the ability to set goals, make the necessary efforts to achieve them, as well as knowledge of the strategies and tactics of their performances. Prior to the experiment similar goals had 62.7 % of students. The number of students with intermediate targets (up to one year) is considerably lower (38.2 %). And finally, the number of students who had long-term plans was only 18.2 %. It is known that sense of purpose (complexity, availability of funds, accounting abilities) increases the likelihood of achieving, increases motivation and enhances the activity of the student. Actualizing the additional motives of self-assertion and self-motivation can increase the target's motivation influence.

Focus on a successful professional career and the abilities of students are in a dialectical unity, and each of them in some way affect the level of success. If we talk about the diagnostics of personality traits, the best method in technical

colleges is to observe, because the teacher has the opportunity to observe the behavior and activities of students in various life situations and training.

In the process of professional training it is required to intensify the desire for self-knowledge. Becoming aware of one's qualities, abilities, development capabilities contributes to a person's inner world formation and enrichment of his semantic relationships. A great role is played by student's awareness of self-concept, which allows them to self-evaluate their qualities. It contributes to the interpretation and motivation of new experiences and expectations and is the source of certain actions in relation to themselves. These data allowed us to obtain information about the ideal image of a successful professional on the basis of answers to assess the importance of quality and realistic picture of oneself (the distribution of responses by their presence) of students with different levels of achievement motivation (see Table 2.1).

Table 2.1. Hierarchy of qualities by their importance (the ideal) necessary to gain success for students with different levels of achievement motivation

Characteristic of qualities	Levels of achievement motivation			
	High	Average	Low	Avoidance motivation
The presence of the main objectives in the lives	1	1	1	5
Self-confidence or strong I	2	2	2	1
Independence	5	4	3	2
The initiative and leadership	3	5	4	8
Imagination	11	7	7	10
Optimism	9	8	6	11
Self-Control	4	3	5	6
The habit of saving	15	15	15	15
Exact thinking	6	6	8	3
Concentration	7	10	10	4
Cooperation	12	9	9	9
The habit of doing more of what you paid or what are expected from you	16	16	14	16
The need to consider lessons of failure	8	12	11	12
Tolerance	10	11	13	14
Attractive appearance	14	14	16	13
The use of the "golden rule of morality, that means "treat people the way you want them to do to you"	13	13	12	7

For example, students with a high level of motivation considered important for success achievement such qualities as having a primary goal (1st place), confidence (2nd place), initiative and leadership (3rd place), self-control (4th place), independence (5th place), etc. The presence of the main goal and self-confidence are important for all groups of students wishing to achieve success. Students focused on avoiding failure, give enough importance to self-confidence (1st place), independence (2nd place), the concentration of thought (4th place), its accuracy (3rd place). The presence of the main goal in life is rated by them fifth, self-control sixth, the "golden rule of moral" seventh, etc.

As for the availability of the qualities needed for success (see tab. 2.2.), the students with high and medium motivation of achievement, according to their self-evaluation, are dominated by such features as the presence of the main goals in life, self-confidence, independence, initiative and leadership, optimism, imagination, self-control. With the students with the motivation of avoiding the failure, these qualities are expressed much weaker. They are characterized by such qualities as imagination, accurate thinking, cooperation the "golden rule of morality." It is interesting to note that the presence of the main goals with students focused on the avoidance of failure ranked 12th, and self-confidence – only 13th place.

Thus, the results obtained in the ascertaining experiment made it possible to establish that personality traits are markedly different in students with different levels of achievement motivation, which has a major impact on students' directivity for a successful professional career. Most of the students had not realized their potential and had at their disposal the vast reserves of increasing their activity. To do this, formation of focus on successful professional activities is needed.

To solve this problem, a phased formation technology of successful professional activity was developed, which is based on humanistic values that defining the disclosure of students' potentials and enhancing their capacity. In terms of content-technology aspect this includes an aggregate of programs, forms and methods of training, technology implementation, the psychological skills of self-mastery (see Table 2.3.).

Leading conceptual framework of this study is person-directed approach in the organization of the students' training process aimed at personal development as a condition for success of professional development and social adaptation, providing psychological and educational assistance in this process. This approach provides saturation of students' activities with situations of success, creation conditions of freedom of choice, independent decision-making, activation of reflection. To do this, it is needed to use methods of self-evaluation and self-correction, self-examination and self-education, the design of the behavior and personal self-development.

Table 2.2 – The hierarchy of qualities present in students with various levels of achievement motivation (in their self-assessment)

Characteristic of qualities	Levels of achievement motivation			
	High	Average	Low	Avoidance motivation
The presence of the main objectives in the lives	1	1	2	12
Self-confidence or strong I	2	3	3	13
Independence	3	2	1	10
The initiative and leadership	4	6	10	7
Imagination	6	4	4	8
Optimism	5	7	5	6
Self-Control	7	5	9	5
The habit of saving	10	13	12	14
Exact thinking	9	8	8	1
Concentration	8	10	13	4
Cooperation	15	12	6	2
The habit of doing more of what you paid or what are expected from you	16	16	16	15
The need to consider lessons of failure	12	9	7	9
Tolerance	14	11	11	11
Attractive appearance	13	15	15	16
The use of the "golden rule of morality, that means "treat people the way you want them to do to you"	11	14	14	3



Table 2.3 – The technology of the formation of the students focus on a successful professional career

Stages of formation	Spheres of personality			Result
	Ethical I	Professional I	Social I	
The preparatory phase	Update on the strategy of success in life and its components. Formation of interest to the profession, growth needs and beliefs. Actualizing the motivation to succeed			Formation of directedness on successful professional activity
Self-knowledge	Analysis of beliefs and values	The study of their own interests, abilities, qualities	The study of their communicative competence	Awareness of self-concept
Self-evaluation	Correlation of their own values to the standards which exists in society	The definition of professional interests and their feasibility	Study of features of their behavior while interacting with other people	Determination of compliance of abilities with the level of claims
Self-control	Managing their emotions	Managing their thoughts	Managing their behavior	Mastering the techniques of self-control
Self-programming for success	Belief in themselves and their capabilities			A high level of motivation to succeed
Self-perfection	Formation, correction of values, correction of moral behavior	Mastering their profession, activation of their activities	Develop a program of correction of their behavior	Self-assessment of the performance, making adjustments in their plans
Targeted behaviour	Drawing up plans for independent work on self-education and self-improvement			The mastery of strategy and tactics to achieve results
Competence building	High moral culture level, professional ethics	Successful cognitive and professional activity	High level of social activity	Self-realisation
Result	Adaptation	Individualization	Integration	Satisfaction with the results of their activities
	Direction on the successful professional activity			

This technology was applied in the process of task forming experiment, which took place under natural conditions without disturbing the logic and the course of the educational process. In the experiment, the researchers set the validity, effectiveness and efficiency of the founded pedagogical conditions that were to ensure the formation of the future engineer's directedness at successful professional career.

### ***2.2.2. The implementation of the pedagogical conditions for the formation of the students' focus on successful professional career***

In the process of forming experiment there were observed the following:

- any pedagogical action of the integration of training should be carried out only through adequate individual student's activities ;
- organizational forms and methods of teaching should create a favorable pedagogical environment for the formation of orientation on success;
- any teacher action must be understood and accepted by the student, and training activities to be realized by him as "his own ";
- the learning process should be assessed by students as self-programming on success, and not the imposition of "foreign models" .

*The implementation of the first of the pedagogical conditions was creating students' positive motivation, which required to ensure students' value attitude to their chosen profession, their acquisition of personal meaning of future engineering activities, awareness of the importance of focusing on professional success.*

To this end, teachers during the course of "Introduction to the specialty (1 year) clearly formulated the goals of training, focused on the importance of the engineering profession for the progressive development of society, the tactics and the strategy of setting goals and achieving them, analyzed the challenges and ways to overcome them. In this case, they formed the students' actual understanding of the profession, and how to master it, helped create the image of the students' future careers. Teachers convincingly explained the value of certain common disciplines for a particular practice of engineers. They also sought to ensure that the training material and methods of working with it were quite diverse. In order to arouse students' interest in the content of the training teachers gave them the opportunity to exercise autonomy and initiative. Students were offered such questions and tasks, which require the active search activities.

At classes students were assured that their personal and professional development is directly related to the meaning and values that they put in their understanding of professional activities. For this, problem-talks, meditation-talks, mini-debates ("I think ...", "The image of the modern engineer", "What

new can I bring to my profession", "Thinking of myself in this profession", etc., etc.) were organized.

The organization of the educational process aimed at developing students' interest in the profession was reflected in their choice of future career satisfaction, although the formation of the latter are also influenced by the adverse social conditions in our society, where the work of the engineer is not well-paid.

An important prerequisite for professional and personal development of students is the presence and awareness of important goals, ideas, meaning, that is a meaningful component of a professional orientation. Therefore, special attention during the implementation of the first of the conditions was paid to particular awareness of future engineers' professional goals. In this case, teachers sought to ensure that the overall objectives, social norms, tasks were individual goals of students, their individual professional and personal strategy. To this end, the following work was made: objectives of (what to do, how to work a lot to learn) were clearly formulated; have sought to ensure that students were aware of the value of activities; identified the means to an end; analyzed the difficulties in achieving the goals and ways to overcome them; provide self-control. All this has enabled students to realize the importance of such tasks:

- formation of professional interest, to both the activity itself and to the process of its learning;
- creating the vision of the profession;
- continuously improve their professional skills;
- ability to set goals, mastery of knowledge of strategy and tactics to achieve them;
- awareness of the value orientation of the individual to achieve success in professional activities.

An important attention was given by teachers to creating in the classroom such difficulties which the students could not overcome with the help of the knowledge they had. In such situations, they became convinced of the need to acquire new knowledge or use of the old one in the new situation, which is an important prerequisite of interest to knowledge. It is known that only that job is interesting that requires constant strain. Too easy a material requires neither mental stress, nor interest. It was also recognized that the complexity of educational material and assignments leads to increased interest only when it is feasible to overcome, otherwise the interest disappears quickly. For the emergence of interest in the learning material an emotional coloring, and pedagogical skills of the teacher are also needed.

The main content of psycho-pedagogical work, directed at solving this task was the use of resources of students' potential and their personal growth. To do this while delivering the course " History of science and technology", in which it

comes to scientific and technical progress and the people that have successfully realized themselves, the students focused their attention on the need for disclosure and development of their potential to achieve professional success. At the same time great attention was paid to the necessity of self-knowledge and self-improvement of students in the course of their training, as awareness of one's qualities, abilities, capabilities development contributes to the formation of self-esteem, self-confidence, and increase self-efficacy.

Flaws in prospective students' psycho-diagnostics, as well as the impact of other adverse factors on the choice of profession were offset by the creation of the training situations for success. This helped to create an emotional experience, to meet the needs of the cognitive and the formation of interest in the training of broad social activity motivation, awareness of the importance of disciplines for the future.

In this case, the work was based on the experience gained in the modern pedagogical theory and practice, to create situations of success (T. Deynichenko, A. Belkin, O. Tcherkashin, et al.) This made it possible to arrange the suitable pedagogical support at all stages of vocational training (substitution, support, cooperation, initiation, advance) in diverse forms (individual, group and frontal), and with use of various methods (preventive, operative, direct, indirect).

Students are given more information about the patterns and mechanisms of success. For this course was developed "Psychology of Success", the content of which is set out in Annex B. Delivering this special course instructors constantly sought to achieve the mainstreaming of motives: to support the desire to achieve high results in the work, to create a situation of success, using situational and role-playing games, designing and self-projection. It was divided into six sequential phases of updating and learning motives to achieve success:

- 1 ) to highlight the importance of the motive to achieve success;
- 2) the acquisition by students in the course of a variety of games and during the performance of specific exercises experience of thinking, behavior, emotional response, typical for highly motivated individuals;
- 3) help students to understand the specific concepts, meaning the various components of the motive to achieve;
- 4 ) a comparison of their potential with their ideals, their basic spiritual values and personal commitment motive;
- 5) The practical use of the knowledge acquired by students in real-life situations, in accordance with the motivation to achieve.

An important place in the classroom took training (training of interpersonal communication, training, motivation to succeed, image-training), during which students were oriented to the formation of skills, personal experience in their professional activities, as well as the correction and development of motivational, behavioral attitudes. Teachers exhibited advance estimates,

picking up individual tasks, paying particular attention to the positive interactions with students, as well as the optimism of training, strengthening of belief in themselves, their capabilities, creating a climate of confidence, increased the interest of the participants.

The goal of the training consisted in the formation of a positive evaluation of the self, through behavioral feedback, positive thinking, imagination, self-confidence, the ability to control one's thoughts and feelings. Oriented subjects training exercises and assignments: "The successes in the past", "Emotional Satiency", "New Name", "OK", "Avoiding failure", "Will-form a positive self-image", etc. During the training sessions mood, confidence, a very special atmosphere, the activity of the participants are important. The training contributed to the knowledge of such manifestations of *I* as:

- relationships with others, which makes it possible to compare oneself with others;
- "through the eyes of others", which allows to learn the opinions of others about oneself and about the impression one makes on those who come into contact with him;
- observation of one's own internal states, understanding of the learning experience;
- evaluation of oneself and the results of one's activities (self-assessment method which helps the development of the individual) ;
- evaluation of appearance (participants learn to see and accept themselves from aside) .

Conducting trainings provided for the following stages:

1. The subjects were explained their experiences and actions conditioned by their orientation to failure, in combination with diagnostics methods' application.
2. They were contrasted to the position of individuals focused on success, with special highlighting of the differences in their causal attribution.
3. The subjects studied scenarios of actions of individuals focused on success, and fixed them in role-playing games.

Methods of formation for the successful professional activities were limited to the following procedures: a psychologist or specially trained teachers explained to students how a person with a highly developed motivation to achieve reasons, speaks, acts. They tried to influence all three determinants: a study of examples of desired behaviors, approval and signs of respect, learning by example of the presenter of the program as well as through self-observation and verbalization of all behavioral and cognitive elements relevant to the motive to achieve.

Currently there have been developed a variety of training aids to conduct the training of achievement motivation (training videos, special game booklets

with themed stories, etc.). The main problem relating to the conduct of training is that it requires the readiness for situational response, since it is impossible to predict in advance its outcome. In this case, the teacher determines the rules of work and monitors their implementation. In our method, we used the rules formulated by scientists A. Prutchenkov [163]:

- trusting and sincere style of communication due to the confidentiality of what is happening in the group;
- communication on a "here and now" principle;
- personification of speech;
- no direct estimates of people;
- respect for other participants, the definition of individual strengths of each participant;
- active participation in what is going on, the establishment of an increasing number of contacts with other participants.

The motivation for success development trainings included:

- Role-playing games (simulations of success, in which one of the players attracts others to a particular activity, to convince them of anything, endorses and supports their actions);
- Group discussions ("How to succeed", "How to set goals", "How to manage your motivation");
- Implementation of training exercises with further discussion and analysis of results.

Students were also offered to write essays on professionally relevant topics ("My dream, and the way to achieve it", "What you need to succeed", and "I'm doing this ", "My future career," etc.) At the same time we believed that the use by students in the course of writing essays matching knowledge gained during lectures, intensifies the development of appropriate motivational structures (in particular, the needs of achievement and motivation training).

For the formation of positive motivation for the professional activities of the students, forms of work, providing first-hand acquaintance with the actual production, featuring a modern professional engineer have been implemented (Excursions to the factories "Turboatom", Malyshev , Kharkiv turbine factory; conversations "The history of our institution", "My university is the best"; meetings with alumni who have attained success in the profession). All this contributed to the understanding by the students participating in the experiment, the importance of professional activities, a clear definition of the interests, needs, values, formation in future engineers of positive motivation of professional development, including the achievement motivation.

*The second important condition for the formation of pedagogical directivity of a successful professional career is the widespread adoption of context training aimed at the acquisition of knowledge, development, and acquisition of*

*professional experience and personal qualities as a basis for a successful transformation of learning activities of students in the professional activities of a specialist.*

To provide theoretical training of the students in this direction through the teaching of general, psychological, pedagogical and special subjects a number of specialized courses have been delivered, such as: "The philosophy of governance," "The Psychology of Management", " Managing the development of socioeconomic systems", "Ethics of business relationship", "Psychology of competitive specialist", " Management of modern production ", "administrative culture manager", "Psycho- pedagogical bases of management engineer", "Modern management techniques", "formation of a strategy of innovative development of the enterprise", "Psychology of success achievement", etc.

The implementation of this pedagogical condition was carried out at three levels of training: at the level of educational, quasi-professional, and educational activity.

*At the level of educational activity* forming of students' orientation to achieve success in their professional activities required to find the most effective forms of training. In the experimental work there have been various leading forms and methods of training:

- lectures-debates, providing direct contact with the audience allowed to draw students' attention to the most important issues of the topic;
- lectures-discussions, allowing to activate the cognitive activity of students, gave an opportunity to change the negative and erroneous attitudes of individual students. Discussion is a method of teaching based on the exchange of views on a specific issue, it contributes to a better understanding of the problems, and the ability to defend one's position, consider the opinions of others.
- lectures using elements of " brainstorming", during which there was a collective discussion of the problem situation created by the lecturer;
- lectures considering situations of success in learning and future careers.

At the lectures teachers used techniques such as the establishment of associations, paradox, contradiction, elements of surprise, interest. The use of active forms of presentation of the lecture material was directed not only to increase the amount of knowledge and skills, but also on the formation of a new qualitative state of professional competence of future specialists, their intellectual and emotional culture and the culture of self-development.

Results of the study of teaching methods as ways to enhance the activity of the teacher and students in the learning process strongly suggest that a separate group is formed by the educational games that encourage students to realize productive activity. Playing as an interactive didactic method has several advantages: it is notable for vividness, clarity, activates listeners, allowing more

efficient use of the class. Simulating the conditions, content, professional relationship activity, games promote formation of not only knowledge and skills, professionally important qualities, but also the disclosure of social and psychological aspects of the activity. Game situations contribute to interpersonal communication, as it allows students to test various models of behavior, to observe the behavior of others, to seek the best strategies for communication.

Today, business games are widely used due to the need to improve the management, decision-making and production planning, training and development of personnel. They give the opportunity to bring in learning a subject and social contexts of the future professional activity. During the experiment business games were widely implemented; they are important for understanding the social content of professional activities, systems modeling attitudes characteristic of its particular kinds.

When choosing a set of exercises, games, psychico-technicians relied on the following criteria:

- compliance with the main goal of the lesson;
- sequence of transition from simple to complex exercises;
- the need to change the rhythm of work, the alternation of theory and practice;
- participants receive satisfaction from activity;
- ability of each participant to take part in the exercises and discuss their results.

Among the effective forms of work, image-diagnostics can also be named the role of which was to characterize the quality of a particular individual, to create his psychological profile. In the early stages students looked at pictures of strangers, and then shared their impressions and tried to define the person's occupation, his character, success, etc. Further, they carried out the analysis of "signals" that send information about a person, and concluded on the need for such examples. At the end of the class there was an exchange of views, allowing to get information on how the real image corresponded their ideas.

The use of pedagogical practice of improvisation as a tool for learning marks a fundamentally important interactive approach to the educational process, which gives it the attractiveness and contributes to the creation of situations of success. This method develops reflection in students, helping them to imagine themselves successful people, to better navigate the different situations in practice and in life. Improvisation is aimed at enhancing self-knowledge, increase self-esteem and self-control, creating long-term plans to build a professional personal development.

*At the level of quasiprofessional activity* business games on "Conducting business meetings", "business negotiations" with the use of computer simulation programs were implemented. Creation, analysis, decision, modeling and



simulating a variety of situations of a professional nature and conflicts that arise in the course of such games as "Psychology of influence", "Strategy to resolve the conflict" contributed to the formation of the communicative competence of students. Business Game "Leader" was aimed at the development of professionally important qualities of a competitive future engineer.

An important place in the classroom training was given to the use of a professional orientation, which was focused on the development of students' competence and formed willingness for execution of professional activities. Such training allows transforming the skills necessary for the transition from quasiprofessional to professional level. The purpose of training was to acquire practical skills, personal experience for the practical implementation of activities, as well as a correction, formation and development of motivational behavior attitudes.

The choice of particular technologies for professional success was driven by the need to perform such functions in the learning process: adaptive, compensatory, stimulating, developing, modernizing the structure of knowledge. Their regular and comprehensive application allows to make a creative learning process aimed at the comprehensive training of students develop their independent and responsible approach to their tasks. The introduction of such methods into the learning process contributes to the formation of students' focus on success, their self-knowledge and self-realization, encouraging constant self-adjustment of educational routes.

*At the level of educational activity* of students the following measures were used: setting targets for practical training (analysis of the organization and evaluation of activities of production style, self-assessment of one's own style as a future engineer-manager in production engineering, etc.), organization of scientific research activities (active involvement of the future engineers in writing essays, carrying out state-funded research projects relevant to departments, preparing presentations at scientific conferences.)

The introduction to the process of training the elements of contextual learning is largely dependent on teachers' professional competence. To effectively solve the problems associated with the formation of future engineers' directedness on a successful professional career, a teacher must possess a deep base of scientific knowledge, erudition, pedagogical skill and tact, a high degree of personal responsibility, the ability to uncover hidden human potential and develop his potential.

Ensuring the effectiveness of the design and successful application of educational technology requires improvement of the whole system of psychological and pedagogical training of teachers in higher education, their deep expertise in matters related to self-knowledge, self-evaluation, and the formation of the inner world of students with the principles of didactics,

pedagogical communication. This calls for regular refresher training in psychological and pedagogical skills of teachers.

To do this, within a well-tuned system teachers have the opportunity to improve their skills by participating in regular seminars, the topics of which cover the most pressing problems of modern pedagogy, engineering education in particular. In addition to seminars fairly large and varied activities within the framework of the implementation of new educational technologies are conducted. Teachers have developed, produced and introduced into the learning process original author's special courses, among which are the following:

- Philosophy of Education;
- Management philosophy;
- Basics of social systems;
- Psychology of management;
- The management culture of the head administrator;
- Psycho- pedagogical bases of an engineer's management activities;
- Modern management techniques;
- Psychology of success in life;
- Organizational Behavior.
- Pedagogy of success.

The teacher by effectively exercising his professional skills, promotes the development of students, increases their social status, asserts himself as a person and a professional, gets an incentive to develop their cognitive and professional opportunities. During the experiment, a lot of attention was paid to the development of teachers' qualities such as psychological insight, ability to recognize the internal state of students by their appearance and behavioral responses, the ability to analyze the pedagogical situation. These qualities, in collaboration with the individual psychological characteristics of teachers ensure the success of educational activities and provide the necessary assistance to students. Created by this situations of success contributed to high activity of all participants of the educational process, which was caused by the presence of common purpose and common motivation, distribution of activities between the participants according to their individual capabilities, experience, and abilities.

The teacher who trains students to be successful has to be it and to present it with his appearance and behavior, be an example to follow. All that the teacher says must be to a greater or lesser extent embodied in him, as it gives confidence to students thanks to not only the internal but also the external harmony. A necessary condition for success of a teacher is his tactfulness, the ability to feel human, the ability to attract attention, to find the right approach to a student.

Thus, the formation of the orientation of students for a successful professional career in a student-centered approach and contextual learning

provides for a highly qualified teaching staff and of their organizational relationship with the students, the introduction of effective forms, methods, techniques, types of education, the focus of the educational process on future specialist's development and self-development of professional and personal qualities. This requires a qualified educational support, the close interaction between teachers and students.

In the course of the experiment such important elements of educational support were provided with:

1. Need-motivational orientation on success of the in the "teacher – student" system. This psycho-pedagogical phenomenon generates the synchronization and integration of efforts in solving their tasks. The speed of reaching the level of psycho-pedagogical matching depends on the degree of commitment to success of both parties of the "teacher – student" system.

2. Conducting educational assessment focused on identifying the level of personal and professional development of students, whether they have the motivation to succeed. Close attention was paid to axiological, competency, behavioral, reflective, communicative components of students' personal development, as well as emotional and volitional qualities and states of students that affect their desire for successful self-realization in the future professional activities.

3. The operational use of the forms, methods and ways of work directed at activization of both teachers' and students' personal development, the formation of potentially existing positive personal qualities necessary for success.

4. The experience of states of success by creating the appropriate situations in the pedagogical process.

*Implementation of the third pedagogical conditions, that is, self-development and self-education of students, focused on self-realization of the future specialist was associated with the awareness of students of their self-concept by making on its basis the program of self-education aimed at the formation of the personality traits necessary for success in their professional activities, study and the use of self-improvement techniques for the implementation of these changes in practice.*

Provision of pedagogical guidance of self-education of future specialists was carried out by teachers using:

- diagnostics of professionally significant qualities to succeed according to their presence importance for students; determining characteristics' correspondence of real and ideal self-images of a professional;
- building a positive self-concept, planning changes based on the idea of the ideal image;
- self-monitoring of the dynamics of the various components of their own personal potential as the characteristics of their personal growth;

High demands on the quality of the future specialist training condition the need for greater attention to the formation of teachers' professionally significant qualities, creating a learning environment for the development and disclosure of his personal potential. The solution of this problem to a large extent contributes to the realization of the image itself and on this basis, the formation of the qualities necessary for success in the process of self-development and self-improvement.

During the implementation of the third condition, the researches largely based on the theoretical concepts related to the self-concept of personality. It was viewed as a dynamic set of assumptions about the student's confidence, which includes beliefs, expectations, estimates and trends of behavior. This is also set of facilities aimed at oneself which is inherent in each of them. Based on this information the student forms an idea of what he would like to be and how he should behave, the attitudes inherent to each student. They may change during development and self-development. It is interesting how this process takes place in students while studying at the university. This period in the life of a person is more beneficial not only for the professional knowledge and skills, but also to acquire the skills of self-programming for success and self-promoting, self-education and self-realization of the individual.

At the core of development of students' professional identity and their focus on a successful professional career is the process of creating an ideal self-image and the formation of realistic positive images of themselves. The image of *I* is an internal mechanism created with the help of self-evolving under the influence of the environment. Already in the early stages of its formation, assessment and affective attitudes are grouped around it, giving it the quality of "good" or "bad". Their interpretation is influenced by the culture of others, and also of *I* itself.

Thus, the awareness of self-concept is influenced by internal world and a variety of external influences experienced by the individual. Especially important for it are contacts with other meaningful people who, in fact, determine the individual's representation of himself. At first, almost all social contacts have a formative influence on him. However, since his becoming aware of self-concept it becomes the active principle, an important factor in the interpretation of life experience.

In the course of the experimental work, many students in the analysis of their real psychological portrait gave a positive assessment of the majority of the qualities inherent in them. Some of them at the same time pointed out that it was the first time that they had to think about themselves. Fun for them caused the question of how other people see them: classmates, friends, relatives and family members. Qualified participation in the process of teachers and the establishment of appropriate pedagogical conditions for the formation of a

positive image of *I* purposely allowed to influence the student's presentation of himself as well as the development of its potential.

Self-concept contained a number of indicators that made it possible to characterize the following components of such personal potential students:

a) axiological (interest in the profession, self-esteem needs, values and beliefs, characteristics related to success) ;

b) competency (awareness of the need to improve their qualifications and their spirit of self-development and self-improvement, as well as the characteristics of successful professional competence) ;

c) personal (estimate qualities necessary for success, and self-assessment of their presence in oneself) ;

d) behavioral (goal setting, knowledge of strategy and tactics to achieve them, self-assessment of one's own capabilities and efforts to achieve the desired result);

e) reflective (use of self-control, and self-directed behavior self-reinforcement);

f) communicative (the ability to speak, listen , talk to people , knowledge of non-verbal signals, and the like);

g) emotional and volitional (the presence of willpower, contentment with the choice of future profession and performance ) .

In order to implement the third pedagogical conditions the students had a special course "Theoretical and methodological basis of self-identity" (12 hours), also future engineers were offered to take part in training sessions during the supervisory hours. In the classroom they learned the theoretical foundations of self: compiling programs of self-development, methods of work (self-knowledge, self-awareness, self-constructing, self-instruction, self-observation, self-order, self-report).

At the training sessions the students mastered the methods of self-education (a plan for education and instruction for the purpose of self-confidence, self-evaluation, formation of reflection, management of thoughts, feelings, behavior, etc.) These qualities are essential for a successful career, as well as for achievement success in life. Particular attention was given to the students' report on the results of self-education in the course completion of "The Diary of professional development," the public presentation of the results, which positively influenced the formation of their self-esteem.

An important prerequisite of self-education is professional self-identity, aimed at the development of preparedness for future activities. Thus, awareness of his self-image allows students to evaluate components of one's personal development. In this regard, the formation of a positive self-concept can be widely used during the training at higher education establishments for self-education and self-improvement. The need for such work arises for the students

when they have reached a certain level of consciousness and self-developed capacity for self-reflection and self-evaluation, have recognized the necessity for personal qualities to comply with the set goal and its achievement it. Creating a strong internal positive way of thinking about a particular field of activity and desire of self-perfection in it is an important condition for the formation of pedagogical orientation of students for a successful professional career.

At the core of self-development is the principle of anticipatory self-reflection in the mind of those actions and deeds that one is about to commit, to identify those traits and qualities he is seeking to acquire. If this 'imaginary program' is formed in the learning process, it motivates a person to action, creates incentives for developing willpower to implement them. That's why when a student has a need for the formation of various qualities of his character or in behavior change, it is important to set a clear goal and justify the need to achieve it, sometimes it is even useful to define the terms.

In general, as the results of the pilot study show, there is a noticeable discrepancy in students' assessment of qualities importance and their presence on a number of indicators. For some students this kind of mismatch is more common, including such features as the presence of the main goal in life and self-confidence. This gives grounds to say that students should work on those qualities the importance of which for success that they recognized, but in fact they are manifested in them weakly, or they were underrated.

Therefore, the image of the self can be the key to the formation of student's self-efficacy and control of his behavior. This image defines and limits of his possibilities – what he is able or unable to do. Expanding the boundaries of the image, the student broadens the horizons of his possibilities. It should be remembered that all our actions, feelings, and actions (even abilities) always correlate with the image of self, and that the representation of oneself can be entirely changed.

As a result, coordination of the individual self and its components is enhanced which means the personal growth of the student. Pedagogical mechanisms of self-concept's action to encourage students to self-education consists in the fact that they produce an experience of internal contradictions between the achieved and the necessary level of personal development and contribute to the need for self-improvement.

Scientists believe that the possible *I's* is only the starting point for the transformation. As a result of the detected inconsistencies students schedule a program for the development of qualities necessary for success. Many students have shown a willingness to search for relevant literature, and practices to work on ourselves. The formative experiment in the educational process included acquaintance with practical techniques of psychic self-improvement and methods of mastering them.

The teachers paid special attention to the general positivity of communication with students that helped in their self-realization, and also affected the optimism of training, strengthening belief in themselves, their capabilities. Students self-actualized their "weak points", and the teacher helped define them as subject to change and motivated to work in this direction. The result of this work became an individual for each student program of self-education. In this case, teachers and psychologists have provided for future engineers assistance and pedagogical support in this matter. In accordance with the way the students were gaining experience of self-education, the programs became more elaborated, improved and became more long-term.

An important role in gaining success is played by self-confidence, as well as self-esteem or understanding of the power of *I*. Before the experiment the students in general, according to a survey, evaluated this as the most significant factor in importance and availability of it in them. However, later they realized the importance of the presence of the main goal in life and that it was needed a lot of work on self-education and self-improvement to achieve. And only when they have learned to set nearer goals and achieve the desired results, there appeared confidence in themselves and their understanding of the power of *I*. When they speak about strong *I*, they mean a person's ability to self-organizing and self-fulfillment in achieving a goal, his social potential.

Self-confidence is a property that is not given to man by birth. A huge influence on his formation has life experiences, especially for children. A great role plays upbringing, especially if it does not inhibit the natural tendency of a person to the development, forms the ambition and focuses on achieving success. Self-confident people, correctly estimate the surroundings more often. They are more independent of external circumstances, as well as the thoughts and expectations of others. Self-confidence helps to overcome the obstacles that will be encountered on the path to success.

In this regard, considerable attention during the implementation of the third condition is paid to the method of auto-suggestion, which effectively influences the formation of certainty of future professionals in the process of training. To do this, students learn proposed "formulae of confidence» as a factor of self-programming, which includes the following information about oneself:

1. I know that I own abilities to achieve my goal, and therefore require of myself persistent and continuous action towards its achievement.
2. I am aware that my dominant thoughts are reflected in the actions and gradually become a physical reality. So every day I'll be thinking about what I want to be like, and then transform the image into reality through ongoing practical application.

3. I know that, in accordance with the principle of auto-suggestion, any desire will gradually begin to look for and find effective means for its implementation.

4. I clearly stated and recorded a purpose in life for the next 5 years. I set the price for their efforts after its achievements and certainly have the intention to get it.

5. I fully realize that wealth and status will not last for a long time, if not based on truth and justice, so I will not be involved in matters that require immoral acts and could be harmful to others.

It is found that people with high self-esteem take credit for more positive traits. In the multitude of studies it was demonstrated that these people possess the qualities necessary for success, and are better able to cope with the changes and stressors. The data obtained for these students is characterized by independence, initiative and leadership, enthusiasm, ability to cooperate with others. They realized that the more self-esteem, the more obvious tendency to respond positively to new tasks and their implementation.

In the process of self-education students paid much attention to the ability to carry out the objectives that is organically linked with a number of traits. For example, for such personality traits as carelessness, negligence, disorderliness, alarmism, laxity one can see the shortage of self-control. If we characterize a person as a judicious, careful, cautious, reliable, focused, here is for each trait manifested his ability to control his actions and deeds. Self-control, based on the knowledge of the ethical, aesthetic and legal norms developed by mankind, does not arise suddenly, but is a result of education of a person, and that of self-identity. So the students were persistently taught to plan and control their actions and correlate them to those that are necessary to achieve the desired result.

Self-monitoring within the educational process as a way of reflection includes self-persuasion or self-hypnosis, self-promotion or self-praise, self-punishment or self-judgment, self-restraint. On the content and consequences they may be positive or negative. Positive self-persuasion is aimed at self-education, mobilization of physical and intellectual capacity of the individual. Negative self-persuasion causes undesirable conditions, paralyzing activity, etc.

The property of psyche to reflect its own states, relationships, emotions, manage itself – all this is called reflection. It draws the mind of man to his own inner world. This helps not only to understand one's behavior, attitudes, values, but, if necessary to rebuild, to find new grounds for it. Reflection is not only self-understanding, self-knowledge, it includes processes such as understanding and appreciation of others. To have reflected on something it means to "experience", "pass through the inner world", "estimate".

It is known that the world of reflections is diverse, rich, and individual for each person. It is the capacity for reflection enables one to form images and the



meaning of life, block off ineffective actions. The most important feature of the reflections is their ability to manage their activity in accordance with personal values, form and switch to new methods in connection with the changing conditions, goals, objectives, activities. The results of this study demonstrated that such methods of verbal self-programming as self-approval, self-restraint, self-praise, self-promotion after the experiment, were used by the students more actively than they were before.

An important role is played by self-control. This very important character trait helps a person to manage himself, his own behavior, to maintain the ability to perform activities in the most adverse conditions. Self-control can subdue one's emotions to the voice of reason, not to let them disturb the balance. The main content of this property is the work of two psychological components: self-control and correction. To do this, will-power must be exhibited that characterizes an emotional and volitional component of a person's general development.

During the experiment, the students were also encouraged to build self-willed qualities. Will is a special form of a person's activity, a special kind of self-conscious organization and activity self-regulation. The specificity of will is the person's conscious overcoming the difficulties and obstacles on the way to the goal. As a result of an act of will it is possible to slow down the action of some motives and intensify the action of others. A strong-willed personality is not only consciously setting goals and acting, but also mobilizing its efforts to achieve the desired result. Willpower is associated with self-control of the individual.

Thus, a complete professional-training assumes that the future specialists not only have particular system of professional knowledge and skills, but also their all-round personal development, which includes universal and communication skills. This allows them to better understand and know themselves, to discover and develop their inner resources, to strengthen all aspects of one's potential, to carry out the optimal interaction with other people in terms of their professional activity. Formation of the students' orientation for a successful professional career is a continuous process of students' personal development.

### ***2.2.3. Analysis of the results of the experimental work***

To evaluate the results of the pedagogical conditions necessary for the formation of directivity of future engineers for successful professional work, the integrated processing and analysis of data obtained in the course of the experiment based on a set of methods for scientific and pedagogical research, subject to certain criteria and indicators was carried out in the control stage.

In the experimental and control groups, measurements were made at the beginning and the end of the study. Intermediate sections were also carried out, which made it possible to obtain additional information regarding the success of the experimental work. To compare the dynamics of the test criteria and indicators statistical methods were used: the change of the statistical characteristics of the experimental and control samples was analyzed according to certain criteria of significance.

The main objectives of the control pilot phase:

1) the study and explanation by comparative analysis of qualitative and quantitative changes in formation for the successful professional career of students of experimental and control group in accordance with the selected criteria;

2) based on the generalization of research results general conclusions aimed at improving the readiness of future professionals for a successful career were stated.

According to certain criteria for the successful professional career there were primarily analyzed the changes that have occurred in the motivation-and-value sphere of future engineers. For this the researchers observed changes in their value attitude to future professional activity, interest to her, the relevant needs, the nature of expectations and beliefs, the formation of achievement motivation.

The study has investigated the dynamics of all the components of orientation on successful professional activity in the experimental group compared with the control group's results, with subsequent evaluation of the results. Thus, the study of the dynamics of formation of the studied quality by motivational-value criterion of students' personal potential showed that in the process of forming experiment interest in the specialty increased to 61.8 %, whereas before the experiment, it was 45.4 %. According to the results of the control group, the 5th year students' interest in the specialty remained at approximately the same level and amounted to 45.8 %.

In the study of the needs of students five categories were allocated: physical, safety, social, recognition and self-expression, which were ranked according to the amount of points received and built into a hierarchy of answers. The findings suggest that the needs of students with high and medium motivation for success differ only in that the former were dominated by the need for self-expression, followed by the need for recognition, and the students with average motivation, on the contrary, were dominated by the need for recognition, and then the need for self-expression.

Other types of the students' needs line with high and medium achievement motivation in this order: the need for security, material and social (or interpersonal) needs. Students with low motivation to succeed rank first social

needs, in second place are material needs. The students with the motivation of avoiding failure are dominated by the need for security, the second place is the need for recognition. The need for self-expression they put in last place. Table 2.4 presents data on how to allocate the individual needs of students with different levels of motivation.

Table 2.4 – Hierarchy of needs of students with different levels of achievement motivation

Needs	Levels of motivational achievements			
	high	middle	low	avoidance failure
1. To gain recognition and respect	10	12	13	12
2. To have warm relationship with the people	13	10	12	6
3. To secure future	5	4	3	9
4. To earn	14	13	8	10
5. To have good interlocutors	15	15	15	14
6. To strengthen its position	8	8	7	8
7. To develop their strengths and abilities	3	5	5	7
8. To secure the material comfort	2	1	1	1
9. To raise the level of skill and competence	1	2	6	5
10. To get away	11	11	9	2
11. To strive for a new and unexplored	7	6	4	13
12. To secure a position of influence	4	3	14	3
13. To buy good stuff	12	14	10	15
14. To undertake the work, which requires a full commitment	9	9	11	11
15. To be understood by others	6	7	2	4

According to the results of the experimental work, the needs of students with high motivation for success are: to raise the level of skill and competence (1st place), to secure a material comfort (2nd place), to develop their strengths and abilities (3rd place). The last requirement of students with moderate and low motivation is ranked 5th place, and students with a focus on avoiding failure, 7th place. The desire to improve their level of skill and competence in students with high motivation to succeed is in 2nd place, students with low motivation, 6th place, and with the motivation of avoiding failures, 5th place. The latter desire to

secure material comfort comes first, the second – the desire for avoidance of failures, on the third – to ensure its position as the influence and the fourth – to be understood by others.

These data suggest that the introduction of the above pedagogical conditions forming orientation on successful professional activities contributed to significant changes in the need-motivational sphere. It is known that the critical moments of the development of motivation is the adoption of learning activities and the disclosure of its personal sense when the objective possibilities of satisfying the needs of the individual contained in the activity, get an individual character. Therefore it is very important to impart to the outside-posed tasks personal meaning. As a result of this, the motive becomes an autonomous force which encourages, becomes a purposeful motive, and acts as a cause of goal setting. To set a goal, one must have an appropriate motive: self-assertion, self-realization, financial incentive, the interest in the content of activities, etc.

In the very sphere of motivation the crucial role is played by positive attitude to the profession, as this motive is associated with the ultimate goal of education. Studies conducted in initial vocational education and higher education fully support this position. According to the results of this research, interest in the specialty and satisfaction with the career choice of students with high and medium achievement motivation is significantly higher than of students with low motivation to succeed and the motivation to avoid failure. In this last group interest in occupation and satisfaction with choice are present in only one third of students, which does not contribute to the success of future performance.

An important role is played by the nature of the beliefs inherent in the students. Academic performance of students guided by inspirational beliefs is the highest. Many of them at different stages of the experiment indicated that they had learned how to set goals and believed that they could achieve the desired and succeed in life. There is reason to believe that an optimistic view of one's own capabilities is very useful. Students confident in their abilities will try to implement them in activities and are likely to achieve the desired result.

The focus of the student for a successful professional activity is determined by his desire and a necessity to increase the level of motivation – from the motive of avoiding failure and low motivation to succeed to the middle and high level. The dynamics of the formation of achievement motivation was studied during repeat testing using the MUN questionnaire by A. Rean. As a result, it was found that the formative experiment contributed to a marked increase in the level of motivation to succeed: to double the number of students with a high level and, consequently, reduced the number of students with medium, low achievement motivation, and of students with a focus on avoiding failure.

At the same time there significantly increased not only the number of students striving for success, especially notable growth of those who were doing everything possible to ensure success. The latter account for half of those who took part in the forming experiment, although before the experiment their number was 29.1%, and in the control group their number practically did not change, and was 30.8%. Conversely, the number of students who for various reasons did not, constituted 25.4% prior the experiment, and only 9.1% after the forming experiment, the fifth year students of the of the control group – 19.1%.

Increased levels of achievement motivation in the process of forming a successful focus on cognitive and professional activities enables them to effectively fulfill their potential through optimal behavioral strategies while developing axiological, competence, personal, behavioral, reflective, communicative, emotional and volitional components of the self (see Table 2.5).

Table 2.5 – Characteristics of the personal potential of students with different levels of motivation to succeed (in the conv. units.)

Constituents personal potential, in conv. units.:	Levels of motivational achievements			
	high	middle	low	Avoidance failure
1. Axiological	5,61	4,65	2,67	1,20
2. Competial	2,0	1,68	1,37	1,24
3. Behavioral	8,43	6,63	4,22	2,15
4. Reflexive	3,65	3,18	2,40	1,56
5. Communicative	2,56	2,28	1,92	1,66
6. Emotional	1,71	1,26	0,80	0,37
Total, in conv. units	23,96	19,6	13,38	8,18

Thus, the GPA of the students with high motivation to achieve success rates of 4.85 points, with an average motivation – 4.5 points, with low motivation – 4.22 points and those for whom fear of failure is typical – 4.0 points. These results confirmed the findings of other researchers that the motivation to achieve success positively affects the academic performance of students, and hence on their activity and professional competence. When a student succeeds in teaching he begins to see the way of self-expression, self-actualization in the activities, and the success of it. Lack of success and failures lead on the contrary to the formation of motivation avoiding failure. In general, the overall result of personal level of the students with high motivation is 23.96 conv. units, with an average – 19.68 conv. units, with low – 13.38 conv. u and with the motivation of avoiding failure – 8.18 conv. u.

Thus, for students with a high level of achievement motivation the characteristic is activation of all components of their own personal development and needs growth, the level of which decreases with the level of motivation and becomes very low in students with the motivation of avoiding failure. These data suggest that motivation is a landmark achievement in the mechanisms of orientation of students for a successful professional career, which is a measure of the effectiveness of the proposed pedagogical conditions. It organizes the holistic behavior of students, increasing their educational activity, influences the formation of ideas and choice of ways to achieve it, and contributes to their self-actualization.

The obtained results allow to characterize the personal development of students with different levels of motivation to succeed at higher education establishment.

*For students with a high level of motivation to succeed* is characteristic a deep awareness of their professional success depending on self-knowledge, self-control, and self-improvement. They show clearly pronounced needs related to personal growth: increase the level of skill and competence, to provide material comforts for themselves, to develop their strengths and abilities that fill the future professional activity with personal content. This leads to an increase in the needs of students in self-development, in performance improvement, to purposeful behavior and activating efforts to achieve the desired result, but also contributes to the formation of inspiring belief, faith in oneself, self-esteem and self-programming capabilities for success. They are characterized by the presence of willpower, endurance, self-control, and responsibility for their actions, which certainly contributes to their success in addressing the cognitive and professional tasks.

Such students are engaged in self-education and self-disciplining, they can put in front of themselves a long-term, intermediate and near goals, and they know the strategy and tactics to achieve them. They are more confident than others that are able to achieve the desired and achieved that success in life.

*Students with an average level of motivation to succeed* have quite well pronounced all components of personal development. They are usually active, initiative, seek to acquire the knowledge and skills to work in an organized way and spare no effort to achieve the desired result. They are characterized by a pronounced desire for success, the need for growth and inspiring beliefs, as well as relatively high performance. These students display personally and professionally important qualities, they do their best for their development, are engaged in self-education and self-disciplining.

Students with an average level of motivation are able to set the short-term goals independently and with the teacher to determine the long-term perspectives. They are notable by not only realizing the importance of motivation to succeed, but by their development, and quite pronounced

reflective and communication skills. However, students at this level still need guidance. In the course of their training it is necessary to form self-confidence and a sense of optimism, achievement motivation, desire to develop their skills, the ability to be responsible for the results of activity.

*Students with low motivation to succeed* understand the importance of science, taught at college, are interested in the subject, especially when the teacher makes connections of the considered material with their future profession. Personal professionally important qualities are weak and one cannot always identify them, probably the motive here is characterized by awareness of a "must." He is usually associated with the exterior of the learning process, focused on the formal success, achievement of teacher-evaluated results.

A characteristic feature of this level of motivation is that training for these students is often a way to achieve personal well-being. They can with the help of the teacher to set short-term goals related to training activities. However, such students are often unable to control their impulses, engage in self-education, to be able to deal with their own shortcomings. In this case, it is still possible for the teacher to build a targeted strategy to develop motivation for success through the development of personal qualities, the allocation of them those that are professionally significant. At this level, one can say about the incipient professional identity, and use it to generate interest in the profession, the motive and focus on achieving success.

*The students with the motivation of avoiding failures* are uninitiative, which is manifested in the low academic performance, low desire to achieve success. Among them, most students are not satisfied with choice of future profession and do nothing to achieve success in it, and some do not even think about it. They are characterized by limiting beliefs, so they avoid important tasks, looking for an excuse to reject them. These students are making plans only for the nearest perspective and are afraid to make them on a long-term basis, not knowing the strategy and tactics of setting goals and achieving them. Although their sense of duty and responsibility is high enough, some include such qualities as thoughtlessness and fear-mongering.

This group of students has less developed willpower, reflective and communicative abilities. They do not believe in themselves and that they will succeed in life. Among them are the most dissatisfied. The task of the teacher is to develop their cognitive interest in the profession, generate interest in the activities, the need in labor, self-confidence and a sense of optimism. For doing this, it is necessary to create situations for success in the student-centered learning, search for any opportunities to stimulate their activity.

The obtained *experimental data* give reason to believe that for the students of the experimental group the directedness on a successful professional career more typical, as evidenced by the growth of all the components of personal

development. The result of its formation is the positive dynamics of student performance in the last two semesters, the integrated measure of students' personality development. In general, the students' performance during the formative experiment was significantly higher (4.57 points) than it was before it (4.36 points), and compared with a control group (4.42 points).

The dynamics of the various components of students' personal development as characteristics of the formation of their orientation on successful professional career is given in Table 2.6.

Table 2.6 – Characteristics of individual potential of students with different levels of motivation to succeed (in the conv. units)

Constituents personal building, conv. unit:	The experimental group, people		Control group, people	
	Before experiment (p = 120)	After experiment (p = 110)	ascertaining cut (p = 120)	control cut (p = 110)
1. Axiological	3,00	4,89	3,34	3,59
2. Competial	1,67	2,0	1,62	1,74
3. Behavioural	5,40	7,53	5,32	5,59
4. Reflective	2,56	3,14	2,58	2,68
5. Communicative	2,04	2,30	2,00	2,07
6. Emotional	1,02	1,50	0,98	1,16
Total, in conv. units	16,69	22,36	16,40	17,83

As the results of the experiment show, many components of the personal development of students prior to the experiment and the results of the control group were significantly lower than after it. Formative experiment helped raise students' interest in achieving success, increasing their need in self-development, enhancing competence, formation of inspiring beliefs and faith in themselves, self-esteem and self-programming to succeed, goal-directed behavior and efforts to achieve the desired result. Also there are obvious positive changes in the field of psycho-emotional of students: willpower increases, as do self-control, and responsibility for their actions; level of dissatisfaction with themselves reduces, which certainly contributes to their success in addressing the cognitive and professional tasks.

As for the efforts expended by students in achieving the desired results, the qualities of responsibility, sense of duty, discipline, will, are evident in students on the results of the formative experiment to a greater extent than before. Conversely, such qualities as laxity, carelessness, negligence, thoughtlessness,



alarmism, though also characteristic for some students, but they were obvious to a lesser degree than before the experiment. It follows that the indicators of the behavioral component of the potential of the individual student, prior to the experiment were significantly lower than after it.

In the course of research the adequacy of their knowledge, skills and abilities was assessed by the students. And the pre-emptive number of them considered their knowledge insufficient. In this regard, of great importance is the willingness of students to continuous self-development and self-perfection. Find it necessary 55.0 % students before the experiment and 76.4% after it, whereas in the control group answers changed from 56% to 60%. Many of the students during the formative experiment outlined a specific program of independent work under the guidance of teachers in self-development of their abilities, skills, and professional development.

On the basis of summarizing the results of experimental work it has been found that providing theoretically sound pedagogical conditions affects the quality of students' training: levels of students' educational achievements have improved, in the course of the work completeness of learning professional knowledge and skills has increased, as have cognitive activity as a whole and its individual indicators (independence, initiative, responsibility, etc.), professional interest intensified, the number of students with adequate self-esteem has grown, etc.

Thus, in the course of the study a direct the correlations between the level of development for the successful professional career of engineering students and the quality of their training has been found: with the level of focus increasing grows their willingness to practice.

According to the analysis of the data, there are three levels of formation of students' orientation for successful professional activities. For example, if a future engineer is proof of professional interest and sustained professional motives, is keenly aware of the social significance of his chosen profession, shows a positive value attitude to the engineering profession, strives to master the full, deep, deliberate, effective specialized knowledge and skills to use it in practice, has a well-formed professional skills (intellectual, organizational, communicative, etc.), is constantly engaged in professional self-education, exhibits in various activities professionally important for the engineer personality, constantly strives for reflecting his personality, has adequate self-esteem – this indicates that he is focused on the successful professional activity, and is at a high level of formation.

If a student takes a situational professional interest tends to be an engineer, but is not well aware of the importance of directedness for the successful professional career, shows indifference in relation to future profession, demonstrates a desire to achieve success in learning professional knowledge, skills and competence, seeks self-education, but does not always exercise due diligence

activity, occasionally displays professionally important for the engineer personality qualities, has reflective skills, but is not enough aware of their importance, characterized by fragile self-esteem, then the state of formation of direction for a successful professional career in such a student meets a sufficient level.

In the case where a student's professional interest is virtually absent, he does not tend to be a skilled, competitive engineer, shows a negative attitude to the engineering profession, he has a lack of knowledge or the knowledge is sporadic, professional skills and professionally important for the engineer personality qualities are hardly formed, he demonstrates the inadequate self-evaluation, this indicates that the student's formation of directedness at successful professional activity corresponds to the lowest level.

Thus, students in the aggregate are not uniform, their motives of training, professional development are at various stages and levels of development, which requires an individual approach to their training. So, slightly successful students should be involved in a situation of success through the conscious choice of tasks that they can perform and actively encourage their successful execution. The joy experienced by them at the same time stimulates them to new efforts to experience that feeling again. For well-successful students it's necessary to initiate the joy of overcoming difficulties in offering tasks of increased complexity and, conversely, periodically lowering the intensity of training.

In the process of forming experiment there was created a good educational environment by providing the necessary social-and-teaching and psychopedagogical conditions for the formation of students' orientation for a successful professional career. Thus, in the experimental group, the number of students with a high level of development for the successful professional activity increased by 23%, while in the control group, the rate was only 5%, while the number of students with a low level of the researched quality, decreased in the experimental group by 24%, and in control group – by 8%.

This process is continuous, it occurs primarily in the inner world of a person and is mostly expressed in one's performance results. Focus on a successful professional career of students becomes a persistent inner desire for further improvement, a movement to a professional skill and success in life. This was facilitated by the creative interaction of all the subjects of the experimental work, creating situations of success in addressing the educational and upbringing tasks, the positive attitude of students for their future professional activities, formation of achievement motivation, personal development.

Thus, the problem of the success of training is one of the central problems in pedagogy of education. The man has internal natural forces and the pursuit of success, and the problem is reduced to the influence of pedagogy, stimulating the internal capabilities of students, creating the appropriate pedagogical conditions in the learning process to improve the quality of their training.

## GENERAL SUMMARY

Nowadays, much attention is paid to professional success as an essential condition of life success. One of the greatest human needs is to achieve success in a meaningful activity for him, which depends on its readiness to work, and on knowledge and abilities required for this in his professional activities, as well as the ability to appropriately organize their energy and effort.

Traditional approaches to the organization of the educational process of higher education institutions do not adequately contribute to future engineers' preparedness to the profession because of the difficulties, both objective and subjective in character that inhibit this process. In this connection there is a need to improve the system of higher education aimed at the formation of the personality that is aware of its capabilities, striving for self-improvement, maximum self-fulfillment, success in life.

Solution of modern problems of training qualified specialists necessitates the search for new forms of non-traditional approaches to learning activities of students, increase their level of activity in the mastery of the future profession. The task of education is to ensure the strengthening of professional motivation of the individual, encouraging their creative potential, identifying and productive use of personal resources in the learning process, and the formation of readiness of students of higher education institutions for success in their professional activities. Methodological feature of this approach is a constant task-oriented work of students on themselves under the guidance of qualified instructors.

The task of educators and psychologists is the study of patterns and mechanisms of successful human behavior and the formation at the university competitive, resourceful, strong-willed, self-confident personality, focused on success. This is the main component of the new pedagogical thinking, which provides for a review, re-evaluation of all components of the educational process. It implies respect of teachers for the individual, trust, and acceptance of his goals, needs and interests, and the creation of favorable conditions for the disclosure and development of his potential, self-determination and self-realization.

The search for solutions must begin with a definition of form factors that can ensure the process of the productive socialization of future engineer, his success. The solution of the problems of success translates into the sphere of professional consciousness, the inner world of students, purposefully formed at the university and focused on the relation of students to themselves and to the world in which to live and express them. Professional self-awareness causes first

of all reflection in the mind of those actions that are needed in the process of socialization and professional development, identification of those traits and qualities that he has to develop for the implementation of a successful career.

The success is a social quality, which is why it is recognized by person in the learning process and it is achieved at the expense of the effort and activity. Achieving success in any activity promotes self-assertion of personality, appearance of self-belief in one's ability, promotes effective establishment in society. In this connection situations of success should be created during the training. The feeling of experienced success contributes to the formation of the student's self-confidence, self-esteem, develops a sense of self-worth, and activates personality.

Psychological studies prove conclusively that the features of personality's self-identity affect its emotional state, the degree of satisfaction with work, life and relationships with others. Self-evaluation as an essential component of a holistic sense of self is a necessary condition for the harmonious relations both with oneself and with others with whom one communicates and interacts. Adequate self-esteem correlates with self-confidence, the ability to reflect the personality and self-efficacy. However, self-evaluation itself also depends on many factors.

A necessary condition is the creation of a positive image of the inner thoughts about a particular field of activity and the desire to improve oneself in it. The final result of the formation of professional identity is a dynamic system of representations of students about themselves associated with their assessment of what is termed "self-concept". If such a program is formed, it motivates a person to action with respect to its implementation, provides incentives for developing willpower to achieve the desired result.

Thus, the realization of one's self-concept evaluates and diagnoses the direction of one's personal development. It can be widely used during the training in high school for self-education and self-improvement. The need for such work arises from the students when they reach a certain level of consciousness and self-developed capacity for self-reflection and self-evaluation and when they recognize the need for their personal qualities to comply with its goal and its achievement.

It is important for teachers to master modern psycho-pedagogical knowledge, technology, as well as engaging psychologists and utilization of mental self-improvement techniques to provide practical assistance to students in the process of self-education.

Particularly relevant is the study of need-motivational sphere of the individual student. Preparing students at a higher education institution directly depends on those meanings and values that they find in their professional

activities. Availability and awareness of important goals, ideas, meaning, that is, content component of professional work is an essential condition for professional and personal development of the student. The tasks of educational and professional activities must be not so much understood by the students as internally accepted because external influences are transformed into a person's inner world.

The main problem of vocational education is the transition from learning and cognitive activity of students to the development of their professional activity which is associated with the transformation of the professional learning motivation that drives and directs them to the formation of readiness for future careers. This motivation is the internal condition of the development of their professionalism, because only on the basis of a high level of personal development can be an effective self-realization. The transformation of learning and cognitive motivation of students into the professional one is one of the main components of the educational process. It is associated with the production of specific goals by which they can better organize their activities and plan the work associated with the mastery of their future profession, determine the content of joint activities with the teacher. This will increase the activity of students and mobilize them for further independent work.

For qualified training of future engineers is important to focus on the formation of a successful professional career, which is a collection of persistent motives, causing the internal needs for enhancing their own personal formation and development. This requires the provision of training and education as a system of targeted efforts to expand the capacity of students and on the principles of student-centered approach that gives the opportunity to create the most favorable conditions for satisfaction of their needs, interests and intentions. This allows to link the goals and objectives of the training of future engineers with a special role of achievement motivation as an important factor for the successful formation of professional activities.

Pedagogical conditions necessary for the formation of students' orientation on successful professional activities are to provide positive motivation training (value relation to future trade, professional-and-educational interest, achievement motivation), the widespread introduction of context-oriented training on the acquisition of knowledge, development of professional skills, the acquisition of professional experience and professional and personal qualities as a basis for a successful transformation of learning activities of students in the professional activities of a specialist, the activation process of self-development and self-education students, aimed at the self-realization of the future specialist.

The results of the study of the formation of the students of higher technical educational institutions focus on a successful professional career carried out by the authors speak about the effectiveness of the proposed pedagogical conditions. This makes the learning process creative, aimed at all-round training of students, enhancing their personal development, stimulating the desire for self-improvement, increasing the motivation to succeed and a willingness to succeed professionally.

Thus, the successful training requires an active awareness by a personality of its *I*, governing oneself, one's behavior, internal state. This process requires from an individual productive activity, which is the constant adjustment of the actions, behavior, acts, which in turn leads to the formation of professional identity, development of confidence, adequate self-esteem, self-control and responsibility. It is a long and multifaceted process, comprising the possibility of improving the educational process in terms of the methodology through student-centered learning.

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